REPEATER JOURNAL

CVRA-SouthEastern Repeater Association, Inc.

February, 1985

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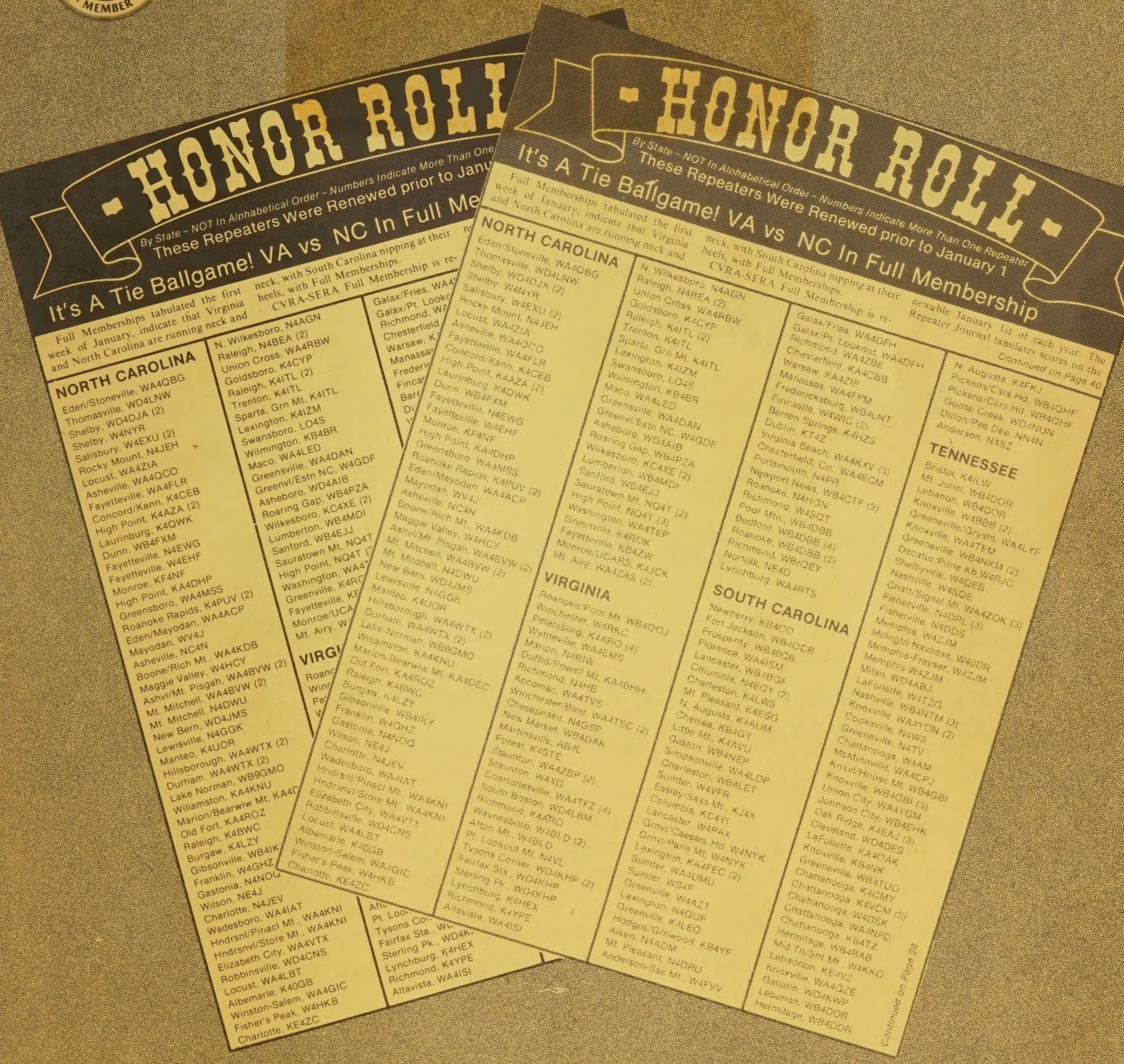

HONOR ROLL

By State – NOT In Alphabetical Order – Numbers Indicate More Than One Repeater

These Repeaters Were Renewed prior to January 1

It's A Tie Ballgame! VA vs NC In Full Membership

Full Memberships tabulated the first week of January, indicate that Virginia and North Carolina are running neck and neck, with South Carolina nipping at their heels, with Full Memberships. CVRA-SERA Full Membership is renewable January 1st of each year. The Repeater Journal tabulates scores on the

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NORTH CAROLINA

Eden/Stoneville, WA4QBG
Thomasville, WD4LNW
Shelby, WD4DJA (2)
Shelby, W4NYR
Salisbury, W4EXU (2)
Rocky Mount, N4JEH
Locust, WA4ZIA
Asheville, WA4OCO
Fayetteville, WA4FLR
Concord/Kann, K4CEB
High Point, K4AZA (2)
Laurinburg, K4QWK
Dunn, WB4FXM
Fayetteville, N4EWG
Fayetteville, W4EHF
Monroe, KF4NF
High Point, KA4DHP
Greensboro, WA4MSS
Roanoke Rapids, K4PUV (2)
Eden/Mayodan, WA4ACP
Mayodan, WV4J
Asheville, NC4N
Boone/Rich Mt., WA4KDB
Maggie Valley, W4HCY
Ashvl/Mt. Pisgah, WA4BVW (2)
Mt. Mitchell, WA4BVW (2)
Mt. Mitchell, N4DWU
New Bern, WD4JMS
Lewisville, N4GGK
Manteo, K4UOR
Hillsborough, WA4WTX (2)
Durham, WA4WTX (2)
Lake Norman, WB9GMO
Wiliamston, KA4KNU
Marion/Bearwiw Mt, KA4DEC
Old Fort, KA4ROZ
Raleigh, K4BWC
Burgaw, K4LZY
Gibsonville, WB4IKY
Franklin, W4GHZ
Gastonia, N4NOQ
Wilson, NE4J
Charlotte, N4JEV
Wadesboro, WA4IAT
Hndrsnl/Pinacl Mt., WA4KNI
Hndrsnvl/Store Mt., WA4KNI
Elizabeth City, WA4VTX
Robbinsville, WD4CNS
Locust, WA4LBT
Albemarle, K4OGB
Winston-Salem, WA4GIC
Fisher's Peak, W4HKB
Charlotte, KE4ZC
N. Wilkesboro, N4AGN
Raleigh, N4BEA (2)
Union Cross, WA4RBW
Goldsboro, K4CYP
Raleigh, K4ITL (2)
Trenton, K4ITL
Sparta, Grn Mt, K4ITL
Lexington, K4IZM
Swansboro, LO4S
Wilmington, KB4BR
Maco, WA4LED
Greensville, WA4DAN
Greenvl/Estn NC, W4GDF
Asheboro, WD4AIB
Roaring Gap, WB4PZA
Wilkesboro, KC4XE (2)
Lumberton, WB4MDI
Sanford, WB4EJJ
Sauratown Mt, NQ4T (2)
High Point, NQ4T (3)
Washington, WA4TEP
Greenville, K4ROK
Fayetteville, KB4ZW
Monroe/UCARS, K4JCK
Mt. Airy, WA4ZAS (2)

VIRGINIA

Roanoke/Poor Mt. WB4OOJ
Winchester, W4RKC
Petersburg, K4ARO (4)
Wytheville, WA4EMS
Marion, N4BIW
Duffid/Powell Mt, KA4BHH
Richmond, N4HE
Accomac, WA4TVS
Winchester/Blmt, WA4TSC (2)
Chesapeake, N4GSP
New Market, WB4DAK
Martinsville, AB4L
Forest, K4STE
Staunton, WA4ZBP (2)
Staunton, W4XD
Charlottesville, WA4TFZ (4)
South Boston, WD4LBM
Richmond, K4ARO
Waynesboro, W4BLD (2)
Afton Mt., W4BLD
Pt. Lookout Mt, N4VL
Tysons Corner, WD4KHP (2)
Fairfax Sta., WD4KHP
Sterling Pk., WD4KHP
Lynchburg, K4HEX
Richmond, K4YPE
Altavista, WA4ISI
Galax/Fries, WA4DFH
Galax/Pt. Lookout, WA4DFH
Richmond, WA4ZBE
Chesterfield, KA4CBB
Warsaw, KA4ZIP
Manassas, WA4FPM
Fredericksburg, WB4LNT
Fincastle, W4WIC (2)
Barren Springs, K4HZS
Dublin, KT4Z
Virginia Beach, WA4KXV (3)
Chesterfield, Co., WA4ECM
Portsmouth, N4PR
Newport News, WB4CTF (2)
Roanoke, N4HON
Richmond, W4SQT
Poor Mtn., WB4DBB
Bedford, WB4DBB (4)
Roanoke, WB4DBB (2)
Richmond, WBrQEY
Norfolk, NE4D
Lynchburg, WA4RTS

SOUTH CAROLINA

Newberry, KB4CO
Fort Jackson, WB4OCB
Prosperity, WB4OCB
Florence, WA4ISM
Lancaster, WB4BGF
Columbia, N4EOY (2)
Charleston, K4LWS
Mt. Pleasant, K4ESG
N. Augusta, K4AUM
Chelsea, KB4GY
Little Mt., K4AVU
Gaston, WB4NEP
Simpsonville, WA4LDP
Charleston, WB4LET
Sumter, W4VFR
Easley/Sass Mt., KJ4X
Columbia, KC4YI
Lancaster, W4PAX
Grnvl/Caesars Hd, W4NYK
Grnvl/Paris Mt, W4NYK
Lexington, KA4FEC (2)
Sumter, WA4UMU
Sumter, WS4F
Greenville, W4AZT
Lexington, N4GUP
Greenville, K4LEO
Hodges/Grnwood, KB4YF
Aiken, N4ADM
Mt. Pleasant, N4DRU
Anderson/Sas Mt., W4FVV
N. Augusta, K4FKJ
Pickens/Cars Hd, WB4QHF
Pickens/Cars Hd, WB4QHF
Goose Creek, WD4NUN
Dillon/Pee Dee, NN4N
Anderson, N4SZ

TENNESSEE

Bristol, K4ILW
Mt. Juliet, WB4DOR
Lebanon, WB4DOR
Knoxville, W4BBB (2)
Greeneville/Grystn, WA4LYF
Knoxville, WA4TEM
Greeneville, WB4NKM (2)
Decatur/Pone Kb, W4RJC
Shelbyville, W4QEB
Nashville, W4SQE
Chatt/Signal Mt, WA4ZOK (3)
Fisherville, N4DRL (3)
Fisherville, N4DDS
Memphis, W4ZJM
Millngtn Navbase, W4ODR
Memphis-Fraysar, W4ZJM
Memphis W4ZJM
Milan, WD4ABJ
LaFollette, W4TZG
Nashville, WB4NTM (3)
Knoxville, WA4YON (2)
Cookeville, N4WS
Greeneville, N4TV
Chattanooga, W4AM
McMinnville, WA4CPJ
Knxvl/House Mt, WB4GBI
Knoxville, WB4GBI (3)
Union City, WA4YGM
Johnson City, WB4EHK
Oak Ridge, K4EAJ (3)
Cleveland, WD4DES
LaFollette, KA4OAK
Knoxville, KB4NK
Greeneville, WB4TUO
Chattanooga, K4CMY
Chattanooga, K4VCM (2)
Chattanooga, W4DSK
Chattanooga, WA4NFO
Chattanooga, KB4TZ
Hermitage, WB4RAB
Mid Tn/Snt Mt., W4KKO
Lebaonon, KE4VZ
Knoxville, WA4GZE
Gallatin, WD4KWP
Lebanon, WB4DOR
Hermitage, WB4DOR

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- VE Examination Schedules
- New Updated Repeater Index
- 1985 Hamfest Calendar

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REPEATER JOURNAL

CVRA - SouthEastern Repeater Association, Inc.

FEB., MAR., APRIL
VOLUME 14, NO. 1
ORGANIZED IN 1971
"IN OUR 14th YEAR!"

Editorial Comment

Swimming Thru the Sea of Applications. . .

This time of the year is always roughest on the people who try to take care of the five-state repeater index. Since all Full Memberships expire on December 31, there is a run to get new memberships correctly logged in the printout, and see that each one credits the proper repeater as a full member. In addition, there is the checking to be sure that both persons named as representatives are logged properly.

Over the years, Lindsay and I have had a double checking system. I send him copies of every membership, then I mark correct information onto a double spaced repeater printout of all the states. When I get the new printout back, which will be used in the Journal for the February issue, I check again, against all the applications to see that everyone is properly registered.

To all this, add keeping score of which state has how many memberships, representing how many repeaters, and who got in before December 31 to qualify for the Repeater Journal Honor Roll.

Generally we take pride in saying the index is correct. But this year, I know it isn't. The reason it won't be is because we had some applications that were so wrong, or so confusing that we just never could make out what was correct.

It's really quite interesting to go through a couple hundred Full Membership applications and read comments written by representatives.

One person writes, "I'd fill this thing out completely with all my repeaters if you folks would supply me with enough applications. . ." (I'm sending him a brochure on a Xerox machine).

Another writes, "I never got a renewal notice. . . so I searched through my things and found one of the old type. . . and sent that in. . ." (I'm sending him a note to check Page 12 of the November Journal.)

One person wanted to know if the "yes" on his mailing label meant his dues were already paid. One person wrote "no change" on his application, however we notice his repeater is still listed with a "WR" callsign.

We get applications on associate membership blanks, paper bags, notebook paper, and once on an ARRL membership form. We have some who send us their coordination recommendation sheets. We have some who mark their repeater as being "coordinated" yet they are using a frequency upside down from the CVRA-SERA bandplan. Speaking of upside down frequencies, we thought we simplified things on the application with repeater "input" and repeater "output", but you would be amazed at how many applicants write their frequencies in backwards. Usually a check with the master index tells us of the mistake. We have one repeater that is rotating six different amateur calls.

Referring to the "no change" or "same as last year" forms we get. Since they don't have the time to fill out ONE single sheet form, to assure important information about their repeater is updated at least once a year, we feel since we have to go through over 300 of these applications in less than 2 weeks, we won't take time to look back and see "what last year was." We xerox their blank sheet with appropriate numbers on it, see that city, call and frequency is correct and that is what is sent to the Directors for that year.

Other messages such as "send all information to our club secretary" are included, even though the person is not listed as a representative.

If we used the postage and telephone necessary to straighten out all this information, Memberships would have to rise another 50%. Few people realize that the $4.00 paid for an associate, or $8.00 for TWO full memberships, just covers the cost of printing the Journal. The rest of our money for mailing, forms, envelopes, telephone, meeting expenses, coordination expenses and everything else comes from Journal Advertising.

I think perhaps the most confusing issue on repeaters before me now is trying to figure out one situation. Three different applications listed one frequency for a repeater, with

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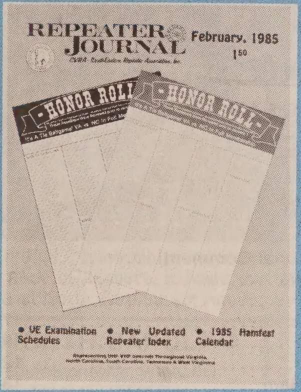

REPEATER JOURNAL February, 1985
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HONOR ROLL

- VE Examination Schedules
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ON THE COVER

It is fitting that the "Honor Roll" take the position of our cover this issue. CVRA-SERA starts off its 14th year of operation with over 50% of all repeaters in its territory represented by Full Membership before the first month of renewal is over. If all who were members last year renew soon, we will hit all time records by the May issue of the Journal in Full Membership.

Journal Staff

EDITOR & PUBLISHER
Wayne C. Williams, K4MOB
600 Lakedale Road
Colfax, N.C. 27235
(919) 993-5881

TECHNICAL EDITOR
Herman Cone, WB4DBB
79 Hunting Lane
Goode, Va. 24556
(703) 586-5643

ADV. & SALES MANAGER
Sharon Ward
5573 Vienna-Dozier Rd.
Pfafftown, N.C. 27040
(919) 924-0520

CIRCULATION MANAGER
Larry McLaurin, WB4VJE
1114 Wiley Lewis Rd.
Greensboro, N.C. 27406

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type/design, Kernersville

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Camera Graphics by:
Piedmont Pub. Co., W-S

Layout, Pasteup, Design
Wayne C. Williams, K4MOB

Other Journal Assistance:

Gerry Williams
Jane McLaurin
Alton Ward KB4EP
David Ward, KA4LVO

REPEATER
JOURNAL

FEB., MARCH, APRIL 1985

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About the Repeater Journal . . .

The CVRA-SERA REPEATER JOURNAL is published quarterly, during the months of February, May, August and November of each year and mailed free to members of CVRA-Southeastern Repeater Association, Inc., a non-profit coordinating organization made up of repeater owners and users. Permission is granted for use of material contained in the REPEATER JOURNAL, provided proper credit is given. The REPEATER JOURNAL Editor will swap newsletters with other Repeater Councils and News organizations on request. The REPEATER JOURNAL press run is 4,500 copies with circulation membership in excess of 3,900 and is entered as Third Class Mail at the Post Office in Greensboro, N.C. REPEATER JOURNAL copies may also be obtained at most area hamfests for $1.25 per copy. All news and Newsletter exchanges should be mailed to the Editor and Publisher, Wayne C. Williams, K4MOB, 600 Lakedale Road, Colfax, N.C. 27235.

About Associate Membership

Repeater users and Amateurs are invited to join CVRA-SERA as Associate Members. A membership fee of $4.00 per year will enable members to support the organization and receive the "Repeater Journal". Note: Associate Membership deadlines are on the 15th of the month preceding months of publication – Jan. 15, April 15, July 15 and October 15. Persons joining or renewing their membership must have their application into the Greensboro Post Office Box by these deadlines to receive the next upcoming Repeater Journal in February, May, August and November. Memberships received after any deadline will not receive the next to be published Journal, but instead will receive the forthcoming issue the next quarter. Memberships received at hamfests will receive a current "Repeater Journal" as long as supplies are available and the next regularly scheduled issue through the mail.

About Full Repeater Membership . . .

Officers and Directors are elected from members of CVRA-SERA Full Membership. Any repeater owner or club may join our organization as a Full Member by filling out an application and submitting it with $8.00 annual membership fee. Two representatives are named for each membership and each receive the "Repeater Journal." The Full Member repeater is appropriately recognized as a full member repeater in our repeater index in the Journal. Full Memberships all expire on December 31 each calendar year.

Officers & Committee

PRESIDENT
A. Carter Cogle, K4ARO
1667 Varina Avenue
Petersburg, Va. 23805
(804) 733-8411

VICE-PRESIDENT
Jim Fitzgerald, K4OJE
909 Penobscot Road
Richmond, Va. 23227
(804) 266-7459

TREASURER
Raymond K. Adams, N4BAQ
5833 Clinton Hwy., Suite 203
Knoxville, Tenn. 37912
(615) 687-5410 Home
(615) 688-7771 Office

SECRETARY
Nita Morgan, N4DON
1504 Woodnymph Trail
Lookout Mtn., Tenn. 37350
(404) 820-2065

REPEATER MEMBERSHIP
(Owners & Rptr. Oper.)
Gerry Butts
CVRA FULL MEMBERSHIP
P.O. BOX 5655
Greensboro, N.C. 27435.
(919) 993-5856

ASSOCIATE MEMBERSHIP
(Repeater Users)
David Ward, KA4LVO
CVRA ASSOC. MEMBERSHIP
P.O. Box 5655
Greensboro, N.C. 27435.
(919) 924-0520

ASSOC. MBR. ASSISTANT
Lindsay Cleveland, W4IZI
149 N. Peachtree St.
Norcross, Ga. 30071
(404) 446-2189 Home
(404) 447-3909 Office

DIRECTORS - VICE DIRECTORS
AND THEIR ASSISTANTS
LISTED BY STATE ON
BACK COVER

About CVRA-SERA . . .

CVRA-Southeastern Repeater Association, Inc. is one of the largest Repeater Organizations in the United States. In our 14th year of operation, the Association shows positive proof that coordination efforts have paid off in the Districts it serves. Two of our Districts are 11th and 13th in the Nation in numbers of Amateur repeaters. We shall strive to continue to keep our area interference free with cooperation and coordination efforts of our Amateur repeater owners and CVRA-SERA as in the past 13 years.

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Aiken, N4ADM
Mt. Pleasant, N4DRU
Anderson/Sas Mt., W4FVV
N. Augusta, K4FKJ
Pickens/Csrs Hd, WB4QHF
Pickens/Csrs Hd, WB4QHF
Goose Creek, WD4NUN
Dillon/Pee Dee, NN4N
Anderson, N4SZ

TENNESSEE

Bristol, K4ILW
Mt. Juliet, WB4DOR
Lebanon, WB4DOR
Knoxville, W4BBB (2)
Greeneville/Grystn, WA4LYF
Knoxville, WA4TEM
Greeneville, WB4NKM (2)
Decatur/Pone Kb,W4RJC
Shelbyville, W4QEB
Nashville, W4SQE
Chatt/Signal Mt, WA4ZOK (3)
Fisherville, N4DRL (3)
Fisherville, N4DDS
Memphis, W4ZJM
Millngtn Navbase, W40DR
Memphis-Frayser, W4ZJM
Memphis W4ZJM
Milan, WD4ABJ
LaFollette, W4TZG
Nashville, WB4NTM (3)
Knoxville, WA4YON (2)
Cookeville, N4WS
Greeneville, N4TV
Chattanooga, W4AM
McMinnville, WA4CPJ
Knxvl/House Mt, WB4GBI
Knoxville, WB4GBI (3)
Union City, WA4YGM
Johnson City, WB4EHK
Oak Ridge, K4EAJ (3)
Cleveland, WD4DES
LaFollette, KA4OAK
Knoxville, KB4NK
Greeneville, WB4TUO
Chattanooga, K4CMY
Chattanooga, K4VCM (2)
Chattanooga, W4DSK
Chattanooga, WA4NFO
Chattanooga, KB4TZ
Hermitage, WB4RAB
Mid.Tn/Sht Mt., W4KKO
Lebaonon, KE4VZ
Knoxville, WA4GZE
Gallatin, WD4KWP
Lebanon, WB4DOR
Hermitage, WB4DOR

Continued on Page 28

OUT

OF THIS WORLD

Hamfest

March 16-17, 1985
Charlotte Civic Center, Charlotte, N.C.

ARRL Roanoke Division Convention

★ FCC EXAMS GIVEN
★ Over 150 commercial boothes set up by all the major manufacturers and dealers of Amateur Radio and Computer Equipment.
★ Many special programs, forums and discussions on all aspects of Amateur Radio and Personal Computers. Plus, many family activities.
★ DX QSL's verified by ARRL. ★ Convenient Downtown Parking.
★ HUGE indoor Flea Market.

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PRE-REGISTRATION PRIZE: Bird Wattmeter, Case, 2 Elements
SATURDAY'S PRIZE: Kenwood 7950 2M Transceiver

1st: Icom 751 Transceiver/Pwr Supply
2nd: Robot 800C Super Terminal
3rd: Home Video Recorder (VHS)
4th: Hygain Tailtwister Rotator
5th: Hal Computer Interface
6th: 500' RG-213 Coax
7th: Astron 35 Amp DC Supply
8th: Telex Boom-Mic Headset
9th: MFJ Bencher/Keyer Combo
10th: Cushcraft 2 Mtr Boomer— & MORE!

HOURLY PRIZES:

Saturday
10AM - Pair 1985 Callbooks
11AM - MFJ KW Dummy Load
12PM - 100' RG-8X Coax
1PM - B&W 6-Pos Coax Switch
2PM - Cordless Soldering Iron
3PM - MFJ 24/12 Hr. Clock
4PM - Astron 5A DC Supply

Sunday
10AM - Shure 444D Microphone
11AM - Ameco Digital Multimeter
12PM - Bencher Chrome Paddle
1PM - Larson 2M Mag Mount Ant.
2PM - MFJ SWR/Wattmeter (KW)

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ARRL

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FCC Actions. . .

North Carolina — The Norfolk office of FCC has notified the owner of a North Carolina Repeater to take steps to eliminate interference to other repeaters. This repeater was operating upside down from the normal CVRA-SERA bandplan, and when conditions were right, would key up all repeaters operating according to the bandplan across three states. The Commission recommended they reverse their frequency to established bandplan — or face further action from the FCC.

• • •

South Carolina — In a puzzling twist, the Atlanta office of FCC made a South Carolina repeater change frequencies because of interference to an upside down repeater in Goergia. The South Carolina repeater was coordinated and operating on the accepted CVRA-SERA bandplan. The Georgia repeater, who apparently filed the interference complaint was operating upside down from the CVRA-SERA or ARRL bandplan for the East coast. This situation will be looked into further to see just why the Atlanta office chose this course of action.

• • •

According to Fred Maia, W5YW, in his report, the FCC has issued updated instruction to VECs. The new guidelines, effective on Jan. 1, eliminated the need for VECS to notify in writing the Engineer-in-charge of FCC District Offices. The notification has to be made at least 30 days in advance of the examination session registration deadline. Now according to Maia, VEs only have to advise the VEC that a test session will be held and request appropriate testing information. This should greatly speed up test administration. VEs are still required to make "Public Announcement" of test schedules.

• • •

The FCC announced in December that effective January 1, the maximum allowable reimbursement for out-of-pocket costs for a volunteer administered amateur examination will be $4.16, based on a 4% increase in the Consumer Price Index. Most VECs say they will probably stay with the $4.00 recoupment fee.

We Apologize

Thanks to a major messup by our "former" printer, the November Journal had to be placed in large envelopes for mailing. Our "on-the-ball" postal service not recognizing them as magazines, let them sit a little longer than usual and the Third Class delivery took from 1 to 3 weeks to get to some members. We think we have solved that problem. We fired the printer. Unfortunately, we cannot fire the post office.

SERA Decals Available

The enw CVRA-SERA Decal is now available. The attractive 4-color decal is 3 inches in diameter. It has a peel off adhesive design.

To get your decals, send a self-addressed STAMPED envelope with 50 center for each decal desired to: SERA Decals, P.O. Box 5655, Greensboro, NC 27435-0655. Decal requests without stamped return envelopes cannot be processed.

Stubby *by Fred Hurteau, WD4SKH*

THE ONLY THING BETTER THAN MISTLETOE AT CHRISTMAS IS A.....
HAPPY VALENTINES DAY!

WILLIAMS RADIO SALES ANNOUNCES

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THE ST-200ET and ST-400ET

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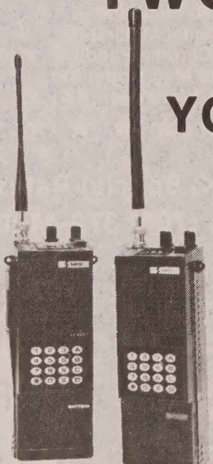

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CVRA-SERA Board Meets - Installs New Directors

—by Wayne C. Williams, Editor

The Annual meeting of CVRA-Southeastern Repeater Association was held January 5-6 at the Ramada Inn in Kingsport, Tennessee.

The Board in informal session Saturday night covered many and varied subjects. Sunday's session was devoted to reports and a program on Packet Repeaters.

In attendance were Directors: Lee McDaniel, Va., Ted Wolfe, W.Va., Ken Woodard, N.C., and J. Tom Park, Tenn. Vice Directors present were: Wally Burkett, Va., and Gene Geisler, Tenn. Assistant Directors included: Danny Hampton, N.C., and Barbarra Gregory, Tenn.

Officers in attendance included: Carter Cogle, Pres., Jim Fitzgerald, Vice Pres., Nita Morgan, Secretary and Ray Adams, Treasurer. Appointees included: David Ward, Associate Membership; Wayne Williams, Editor & Publisher; Sharon Ward, Sales Manager; and Gerry Butts Williams, Full Membership.

Guests included Thelma Fitzgerald and Richard Brown.

Directors were given copies of Full Membership applications for their respective Districts, with a score card showing totals for each State. They were also given a copy of the pros and cons of a 20-kHz bandplan to study for possible future discussion.

Most Directors reported very little problems occurring in their Districts. Lee McDaniel from Virginia said the Covington repeater which was on 22-82 was changing frequencies to 205-805 as soon as they got permission from Governmental agencies in the "Quiet Zone." This repeater for some months recently had been experiencing interference from users of the Roaring Gap 22-82 in North Carolina. McDaniel said they had done some checking and were unable to solve the problem, since some of the users were apparently using amplifiers to get into Roaring Gap.

One other repeater operating on 10-70 was experiencing problems from out-of-district repeaters using their machines for RTTY. They had been told that the other machines were coordinated on the "RTTY channel" of 10-70 from that State. (CVRA-SERA eliminated ANY channel for exclusive use of any particular service years ago) The West Virginia repeater is looking for a new frequency to move to.

It was reported that a South Carolina repeater operating on 915-315 was told to move by the Atlanta FCC office to another frequency when an upside down repeater operating 147.315-147.915 complained about lockup. The Board was quite upset over this decision, since, even though Georgia seemingly doesn't have an official bandplan, they should abide by the adopted ARRL band plan of hi-in and lo-out on 147 mHz for splits. The South Carolina repeater was a coordinated repeater according to the CVRA-SERA bandplan.

(Editor's Note) "No decision was made to pursue the matter, but the irony of the situation of an 'illegal' machine winning over a coordinated machine on an interference case again puts questions into the minds of coordinators as to just whose side is the FCC on."

Ray Adams Treasurer presented a report to the Board and recommended a price increase for Associate and Full Membership. After much discussion, reluctantly it was agreed, a price increase was necessary for the organization to stay solvent with rising costs of printing, materials, postage, telephone and everything else.

The Board voted to raise Associate Membership dues (repeater users) to $5.00 per year, effective IMMEDIATELY. They did recommend however, persons whose membership was expiring in the first quarter of 1985 and had received $4.00 renewal notices, would be honored at the $4.00 price. Any others coming in at $4.00 would be prorated and billed the extra $1.00 for a full year's membership.

Full Membership dues were raised to $10.00 with two representatives still to be named and receive the Journal. Full Membership increase is effective July 1, 1985 and will cost $5.00 to join or renew for the remainder of the year at that price. Dues for the calendar year of 1986, due January 1, 1986 will be $10.00. Full member applications received prior to July 1st for the remainder of 1985 will be honored at the $8.00 membership price.

David Ward told the gathering that the new SERA decals would be in by the time the Journal was published and mentioned that distribution would be through the Greensboro Post Office Box of CVRA-SERA. He said persons wanting new decals should send 50¢ for each decal desired, and a self-addressed-STAMPED envelope to CVRA-SERA DECAL, Post Office Box 5655, Greensboro, NC 27435.

Coming In May

The Repeater Journal will print a special section on Packet Repeaters and Digipeters in the May issue. Interest in this new mode of communication is growing fast in the area. Several Packet Machines are already on the air.

Persons who are already participating in this facet of Amateur Radio and Computers are invited to participate in this special section by sending in articles about their experiences. Photos of your station, setup and antenna systems will be welcome and published in the section. Deadline for articles and pictures will be April 1, any received after that date cannot be included.

David also introduced to the group a REPEATER JOURNAL HOT-P program which would be initiated and announced in the February Journal. David said normally, the Journals are picked up on Friday, sorted, labeled and mailed 3rd class on Monday of publication months.

The new "HOT-P" (Hot Off The Press) program will enable subscribers to this system to have their Journals put in the mail FIRST CLASS Friday afternoon as the Journals are picked up, resulting in delivery of the subscriber's Journal either on Monday (the day the others go out) or by Tuesday, First Class Postage.

Cost for the new "HOT-P" service will be $8.50 per year, and is available only to Associate Membership. He said persons wishing to have the "HOT-P" service could write him for instructions, or in case of new members or renewals, use the new changed Application Blank in the Journal. Normal Associate Membership remains $5.00 per year, renewable for 2 years at a time, the new "HOT-P" service available for only 1-year renewals at $8.50 per year.

After lunch Sunday, the Group was presented a program by Richard Brown of Forest, Virginia on packet radio. The program included a one-hour video tape, demonstration of his packet radio which was set up in the meeting room and a question and answer period. Richard and Lee McDaniel, Va. Director, have promised a special section on "Packet Radio and Digipeters" in the May issue of the Journal.

Earlier the Directors had discussed Packet Repeater frequencise and had voted to recommend a portion of the band for persons wanting a place for their packet machine. The main frequency of 145.01 mHz will be recommended, with 145.03, 145.05, 145.07 and 145.09 listed as alternative frequencies.

The Board again refused to get into the business of coordinating "Simplex Autopatches", but said they would warn potential users and operators to stay off of official repeater inputs and outputs. It was mentioned that most Simplex Autopatches on the 2-meter and 220 mHz band were operating on split simplex frequencies, and occasionally on standard simplex frequencies in most areas. (The future of Simplex Autopatches is still unresolved by the FCC as to just what their legality may be.) This of course, does not reflect on, or even affect Autopatches which are run on standard repeaters.

The group adjourned about 3:00 p.m. Sunday and headed to their respective homes.

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13TH ANNUAL

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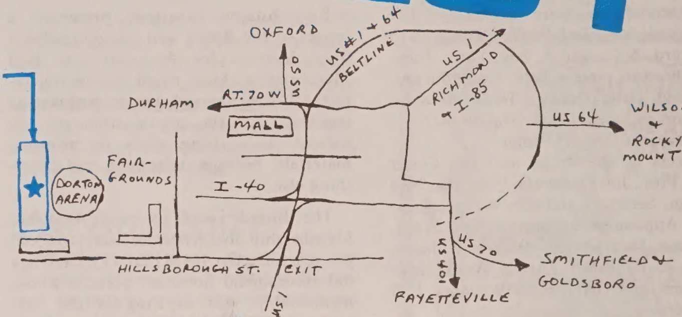

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1st - Choice IC 745 HF or IC 271 VHF Tranceiver w/internal power supply
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3rd - Telex Hy-Gain HAM IV Ant. rotor

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Pre-registration ($5.00 at door) - $3.50
1 Fleamaket space, table, 2 chairs - $5.00 Our tables and chairs only - all activities under one roof - No outside facilities available - 24 hr. security - Vendor set-up Saturday 4-10 pm; Sunday 6 am - Vehicles must vacate the building by 8 am. Bring your own hand cart.

★ **HAMFEST SOCIAL SATURDAY NIGHT**

A welcoming party will be held 7-10 pm for all in the large meeting room inside the Hamfest building. Eats, drinks and door prizes for those present.

★ **SPECIAL INTEREST MEETINGS**

Q.C.W.A., M.A.R.S., ARRL-NTS and others will be here; times to be announced; First come, first served; for meeting spaces, write RARS.

★ **COMPUTER ENTHUSIASTS AND DEALERS WELCOME!**

★ **AMATEUR FCC EXAMS**

By pre-registration only - cutoff April 8
Send your completed FCC Form 610 with a copy of your current license and a check or money order for $4.00 payable to W.C.A.R.S./V.E.C. to:

Mr. John Johnson, WM4P
2118 Lyndhurst Drive
Raleigh, NC 27610

★ Write him for further info. This exam will begin at 8am Sunday at Kilgore Hall, NCSU Campus, approx. 2 mi. east of the fairgrounds on Hillsborough St. at Brooks Ave. Talk-in stations will assist.

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★ **TALK IN SATURDAY AND SUNDAY**

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IC-2AT

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You do not need to be present to win.

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Looking back

—by David Ward, KA4LVO

February, 1975 issue of The Repeater Journal

Looking Back 10 years to the February 1975 issue of the Repeater Journal, we find that a new slate of officers had just been elected and new objectives for the CVRA were being set. This issue with circulation of 800, was printed on 8½ by 14 paper folded in half and stapled to form a 20-page booklet. The front cover story entitled "What's New on the Horizon?" mentions that the CVRA will begin its 5th year in March with 58 member repeaters and 453 individual members. The new officers were: president - Ed Alderman, WA4PEN; vice-president Herman Cone III, WB4DBB; secretary Dave Rawley, W4WDI (now N4XO); and treasurer Al Ross, K4CAW. Appointees for the year were: FCC Liason Don Harris, W4BUZ; Editor Bill Parris, K4GHR; Repeater Membership Bill Page, WB4LWX; and associate membership Lindsay Cleveland, W4IZI.

According to the Journal report, the officers and directors had outlined 3 major objectives for the coming year. First was a plan to study the feasibility of establishing 6-meter repeater coverage over the CVRA territory (Virginia, North and South Carolina). Among the reasons listed for using 6-meters were frequency co-ordination, RTTY, and "Playback recorder machines" to handle club news, repeater info, and ARRL bulletins. The second objective was to establish a technical committee to assist repeater groups and to set standards for repeater circuitry. This committee might also be able to provide circuit boards to repeater groups. The last objective, one which we still have today, was to increase membership and support of the organization.

Another big story from the February 1975 issue concerned the FCC Proposal Docket 20282 named "Restructuring of the Amateur Radio Service". The purpose of this proposal was to increase the growth of Amateur Radio. The article went on to state that amateur radio licensing was on the decline; a loss of 350 licenses per month (4200 per year) was occurring. (At that time, there were only 255,000 licenses issued.) The major concern of hams was the possible loss of spectrum if this trend continued. One solution to this downward trend was to eliminate the morse code requirement from the licensing, thus making it easier for "lower quality" people to become amateur radio operators. The CVRA responded to this by preparing a guide on how to file comments on a "Notice of Proposed Rulemaking". Addresses were also provided to which these comments should be mailed.

Many smaller stories added to the enjoyment of reading the Februray 1975 Repeater Journal. The ARRL was quoted as saying that the FCC would be reducing license fees from $9.00 to $4.00 effective March 1, 1975. (The ARRL was hoping to eliminate the fees completely.) On a related issue, Australia had just doubled their license fee to $12.00 a year. Another story told that the CVRA had just entered into an agreement with 73 Magazine to swap the Repeater Journal for their bulletin, the "Hotline". One story from the "Hotline" reported that Gettysburg was taking about 16 weeks to process an application for a repeater license, that is, if it was a simple repeater. If special circumstances had to be considered or if the forms were incomplete, this time was considerably longer. Another report from the ARRL told that the FCC had been petitioned to allow a photocopy of an operator's license to satisfy the requirement of having the license in his/her possession. This came up due to the increased amount of mobile operation that was occuring. Finally, Vic Clark, W4KFC had written an article (which also appeared in 73 Magazine) concerning inappropriate language that was being heard over amateur radio frequencies.

Another problem mentioned in the issue dealt with the problem of running out of 2-meter spectrum. It would be just over a year before the CVRA territory would run out of 30 KHz splits, so another solution was needed.

50 Year Certificate By Virginia Fone Net

—by Bill Redmond, K4IEC
Net Manager

The Virginia Fone Net was established in 1934. It is an independent directed net, which meets twice daily, at 4 PM and 7:30 PM on 3947 KHz for the purpose of passing traffic within, as well as to and from the Commonwealth of Virginia.

This year the VFN is celebrating its fiftieth anniversary by issuing an attractive certificate to stations who contact 25 net members between September 30, 1984 and June 30, 1985. Contacts on any band count toward the certificate, but the most likely spot to encounter the 150 net members is the net frequency. Contacts during the course of the daily nets do not count toward the certificate, but many net members congregate on the net frequency before and after the daily net sessions.

Keep a log consisting of Name, Call, Net Number, Date and Time (in UTC). When 25 contacts have been made, send the log to the Net Manager, Bill Redmond, K4IEC, 917 Rock Spring Drive, Winston-Salem, NC 27105, along with $1 and a #10 SASE, or $2 for a flat pack envelope.

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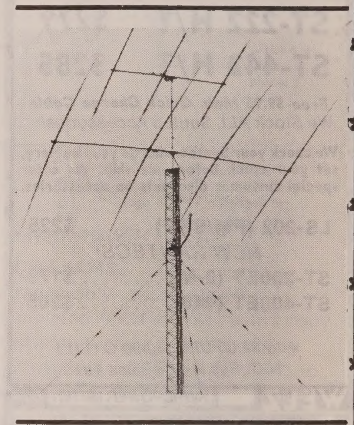

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Where Is North?

-by Ray Adams, N4BAQ

I've stood in the pilot house of a ship at sea watching the helmsman steer a deadly straight course, being guided by a precision gyro compass in such a way that our wake stretched behind us in a perfectly straight line. The 30" magnetic compass, mounted in gimbles, floating in oil, and surrounded by scientifically placed powerful electromagnets to minimize distortion from surrounding metal, including the ships hull, the helsman's belt buckle, etc. oscilatted as much as 30° in either direction from that which the charts showed to be the difference between a true and a magnetic heading. How it this possible? Maybe a "hill" on the ocean's floor with even a hundred feet or more of water covering it and detectable only with a fathometer or other instrument presented a different magnetic field to the compass as we passed by. Of course it didn't show on the chart. This all leads me to the firm conviction that while the published differences between true and magnetic hearings are probably representative of a particular area of the world, their accuracy in relation to one specific point on earth, such as the base of my tower, may be paralelled by the accuracy of the reproduction of the curves of a mountain road as they appear on a road map.

While a portable magnetic compass of any description may be of valuable assistance in allowing a boy scout to differentiate between the north and the south edge of the woods, I do not believe it reliably points to north, at least I'll not set my beam by it.

Where is north?

Every circle, including the earth, contains 360 degrees. Lines of longitude simply indicate those degrees as we move around the earth along the equator or any other meridian. As the English set the system up, where do you think the 0° longitude line is located? All lines of longitude originate at one pole and terminate at the other, and, you guessed it, 0° longitude comes down through Greenwich and are counted in both an eastern and a western direction from there until 180° runs up against each other in the Pacific, begin known as the international date line. To prorate 360° over 24 hours of a day mandate 15° of longitude per time zone. Noon UTC occurs when the sun is at its ABSOLUTE peak above 0° longitude, and will be due south in the northern hemisphere and due north in the soutern hemisphere at any point along 0° longitude. Its shadow would, of course, be the opposite – there is north!!

Now let's get it from Greenwich to the desired tower base. I have an old oil company road map with a 1973 copyright that has longitude (vertical lines) and latitude (horizontal lines) marked on it instead of simple grids. The key to spotting this is that the lines are not paralell to the margin of the map. Closer inspection at margins reveal the lines are numbered in degrees and minutes (60 minutes to a degree). Topographical maps are usually in fine detail and much more precision, but the road map is good enough for me to determine that I am about 83°54.5"W longitude (actually it is 83°54"32', but lets use 83°54" or 83.9°W for our calculations. With 15° per time zone, and the first one is going to be 7½° on this side of and 7½° on the other side of 0°, therefore 82°30" should be the border between Eastern and Central time. My trusty map tells me that line is EAST OF ASHEVILLE, N.C. As a matter of fact it comes through the intersection of US74 and Blue Ridge Parkway.

The sun would peak at that point at exactly ½ hour past noon, as it is now half way to its peak in the center of the next time zone, which of course is going to occur one hour past its peak in the center of the previous zone. These are standard times, DST is yet another political maneuver which the heavenly bodies ignore.

If I'm at 83.9°W and the border of the time zone calculates 82.5°W, then I must be 83.9 — 82.5 or 1.4° inside calculated central time. If a time zone is 15°, then I am $\frac{1.4}{15}$ or .09333 of the way across the time zone or .09333 X 60 (minutes in the hour of one time zone) for 5.6 MINUTES (on the clock) inside the time zone. As Knoxville is using eastern time, 1230 + 5.6 = 12 35 36 for celestial noon at my QTH.

As the earth's axix does "tilt" slightly on a seasonal basis, further adjustment is necessary for absolute precision. Without this adjustment, your greatest error will not exceed 4° beam heading. Tables setting out the adjustment are found in the final chapter of the ARRL Antenna Book. Copyright prevents its reproduction here.

Once you have determined the time you are going to use for celestial noon at your QTH, calibrate the waterbury to WWV, wait for the appointed second, and drive a stake in the shadow of the top of your tower. That stake will be due north of your tower, give or take virtually nothing. If this is done in the winter, the shadow will be longer than in the summer, thus letting you be further away from the tower when you stand at the spot to check and see if last nights storm did turn the mast in the rotor.

Round Table Radio Glossary

HAM OPERATOR. Extraordinarily dedicated individuals who devote hours of study of electronics, mathematics, regulations, and Morse code in order to be allowed to discuss the weather over the radio.

LPM - May 11-12 In Raleigh, N.C.

The Roanoke Division LPM (League Planning Meeting) will be held in Raleigh, N.C. on May 11 and 12.

This annual meeting is held to enable Amateurs, league members and league officials to meet and discuss future courses for the ARRL. As in the past, most ARRL appointees in the area will be present, and of course Roanoke Division Director, Gay Milius, and Vice Director, John Kannode plus several staff members from Newington.

For further information about the upcoming LPM, contact your local ARRL SM, appointee, or the Director.

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The WORMS SQUIRM #1,

'Real Estate And the Ham'

—Special to the Journal
by Craig Wm. Vagell, WB2HJW

My ham radio hobby coupled with my real estate appraisal profession has afforded me some insight into the recent problems concerning radio tower erection.

One thing for certain is that a ham station needs to operate from a piece of real estate. You also need a place to live. Unless you are super rich, generally these two locations are the same. In the past you could look for the lot in the neighborhood which had four tall trees, a view of the Atlantic, and adequate space to support room for the guy wires of a ninety foot tower! Ah, the times have changed. First of all, most properties available have been bought and nobody wants to move. Secondly, when you have finally located your new site, you find the wife doesn't want the yard cluttered up with towers and wires. (OK to clutter it up with swing sets and clotheslines though!) Third, the eyes of big brother are upon you. Yes, it is the local zoning ordinance which in most cases is a most deciding factor prohibiting the antenna system of your dreams.

The ARRL, private hams, senators and other elected government officials have challenged some of these ordinances. The results have been at best mixed, some favor the ham and some do not. There is presently a bill pending before the Senate, and yet another before the House concerning the removal of local zoning regulations from tower erection. It seems like an easy issue for most hams to decide. "I studied hard for my Federal license, I own my property (with the Bank) and I should have the right to enjoy the use of my property as I see fit. Right?"

The ARRL has petitioned the FCC in PRB-1 to remove regulation of tower construction by local municipalities. Comments regarding horror stories fighting local zoning ordinances should be sent to The Secretary of Federal Communications Commission, Washington, D.C., 20554.

In a series of articles to follow in the Journal, the worms will squirm to relate some insights into a complex legal, physical, economic, sociological and psychological problem that few hams understand. The "It's my party and I'll play if I want to" attitude doesn't work anymore! Here are some tips about selecting a site that provides for a good ham location. Future articles will deal with zoning regulation, experts testimony, preparation of your case and general do's and don't's.

About the Author

CRAIG Wm. VAGELL, WB4HJW

Craig Wm Vagell, WB4HJW resides in Cedar Knolls, N.J. He is the Senior Residential Appraiser for his firm, Craig Wm. Vagell & Associates, Inc. of Morristown, N.J., a professional appraisal firm.

Craig is a member of the Split Rock ARA and ARRL. He has his DXCC and WAC on the HF bands. He works through the Office of Emergency Management as Communications Officer in the Hanover Township, and is former Radio Officer of teh City of Garfield. He presently holds an Advance Class Amateur License.

Among his other titles and honors, include: "Who's Who in the world, 1980, "Who's Who in Business and Finance, 1979" and "Ten Young Outstanding Citizens of America Award Nominee, 1984."

In appraising real estate for valuation one major consideration is location. In selecting a ham site, location is also an important factor. Locational characteristics a ham should consider are outlined below:

COUNTY LOCATION: Does the County and general location provide...?
1-adequate supportive facilities - including fire protection, law enforcement, recreational, educational, health, transportation, public road maintenance, affordable tax base, affordable housing
2-adequate local VHF ham facilities consisting of repeaters easily accessed
3-RACES, a well organized emergency communications network

MUNICIPALITY: Does it provide...?
1-adequate supportive facilities similar to the above requirements
2-lenient, or restrictive zoning ordinance regarding tower height and antenna construction
3-RACES on a municipal level for activity in local emergency communications

NEIGHBORHOOD: Does it provide?
1-affordable housing meeting the needs of your family
2-topography conducive to ham radio operation
3-absence of potential nuisances to radio reception
4-cable TV service and underground utilities
5-social acceptance by residents to a potential ham neighbor
6-homogeneous lot sizes conducive to antenna erection
7-restrictive covenants regarding tower or antenna erection

SITE: Does it provide?
1-topographical characteristics for tower location & erection
2-location on the street removed from potential nuisances
3-substantial height above grade from surrounding hills
4-soil composition adequate for antenna erection and grounding
5-functional utility for your family
6-adequate utilities including electric, gas, telephone etc.
7-on site improvements which will not conflict with tower erection
8-foliage screening, but sparse enough to permit antenna erection
9-size, topography, landscaping capable of supporting antenna systems without adversely affecting aesthetic or functional utility of the subject site or neighboring sites
10-any restrictive covenants against buyer erecting antenna systems

DWELLING: Does it provide? (existing or proposed)
1-adequate size, room count and floorplan traffic
2-space for a ham radio station
3-structural soundness to support antennae affixed to the dwelling
4-adequate electrical service
5-archictectural design which will not suffer aesthetically because of antenna construction

This month I have discussed the important factors a ham should consider in location and site selection. Next month, I will analyze these factors in more detail beginning with the considerations in selecting THE MUNICIPALITY in which you may locate. May I suggest you keep this outline to use it as a checklist for relocation decisions. I will be referring to it throughout the article series on REAL ESTATE AND THE HAM.

In future articles, the worms will squirm to cast some insight on zoning regulations, preparing a variance case and the art of compromising your ham location decisions.

FCC Increases Fees Allowed for VECs

Effective January 1, the maximum allowable reimbursement for out-of-pocket costs for a volunteer administered radio examination was increased to $4.16. The amount was based on a 4% increase in the Department of Labor Consumer Price Index.

This does not mean that VECs will automatically raise their recoupment prices to $4.16 per exam. Many have. Several have indicated they plan to remain at the 1984 recoupment level of $4.00.

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Hooray For Newport News

—Thx to ARRL Letter

The city of Newport News, Virginia filed comments supporting the FCC's docket PRB-1, the League's request for preemptive relief from local zoning ordinances.

The City's letter states in part: "Historically, the City has relied upon and been supported by Amateur and Civil Air Patrol radio operators to provide emergency communications resources which were not in our capability to provide." The letter continues: "Although the City is in a position to control our own local zoning or other restrictions, we have no control of other jurisdictions with whom our radio operators might have to communicate to provide us with emergency services."

In conclusion, the letter states: "In order to provide for the safety and welfare of our residents, we request that the Commission issue a Declaratory Ruling prohibiting local zoning and other local and State regulatory restrictions on federally licensed radio facilities, except where such local regulation is clearly necessary in furtherance of the protection of health and safety of the local citizenry."

(Editor's Note: You Amateurs in Newport News should be proud!)

'HOT-P' Journals

"Hot Off The Press" Journals will be mailed on Friday afternoon as they are picked up *from* the printer via FIRST CLASS Mail. Most subscribers will get their Journal 4 or 5 days before anyone else with normal Third Class Mailing. Cost of this new service is $8.50 for 1 year.

Membership Prices

The Associate Membership for repeater users in CVRA-SERA is now $5.00 per year. A maximum of 2-year advance renewals is available. Full Memberships will cost $5.00 from July 1st until December 31, and $10.00 for the calendar year of 1986. Full Membership prior to July 1st will be honored at the $8.00 annual price.

NC 220 Repeater Finds A Permanent Home

The nomadic 223.22-224.82 repeater has finally found what is hoped a permanent home in Gibsonville, N.C. Wayne Hutchins, WB4IK said he plans to keep it there.

The machine, a twin to the 223.28-224.88 machine which went up on Sauratown Mt. North of Winston-Salem, has travelled around for the past 5 years. It started in Graham, moved to Burlington, then to Danville, Va.

It was later sold to a ham in Greensboro who moved it back into North Carolina. A short time later it was sold again and moved about 20 blocks to another location. In late 1984, Hutchins acquired the repeater and with assistance from Danny, WA4YGD completely rebuilt the machine, added a new Wacomm duplexer and a G-7 Hustler antenna. Presently the WB4IKY repeater is available for voice, RTTY or ASCII. Most of the time, W4GRS, Raymond has his MBO connected to the repeater. Wayne said he plans to add an autopatch and raise the 130-foot height of the antenna to a greater height.

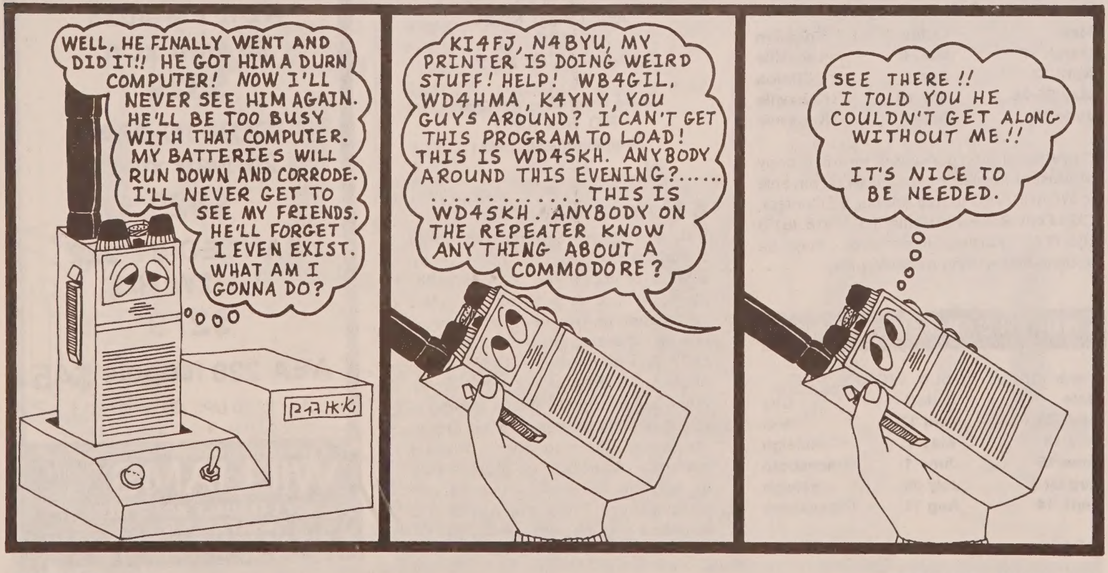
New 440 Repeater

The N4JEH UHF repeater is now on the air in Rocky Mount, NC. The repeater, which has been operational for about four months, is providing excellent radio coverage to the majority of Nash, Edgecombe, and Wilson Counties. The repeater consists of an Icom 3010 RM Repeater, a Wacom WP 678 Duplexer (which is providing superior results), 7/8" heliax hardline, and a Hustler G-7 antenna. The repeater and duplexer along with the repeater controller is mounted in a Motorola cabinet which is housed in a concrete block building. The antenna is mounted on a local water tank which is approximately 170 feet high. At present the repeater is running 12 watts out of the duplexer on the frequency 444.700 mHz (repeater receive 449.700 mHz). Future additions include a receive pre-amplifier, 100 watt power output amplifier, telephone autopatch, and automatic emergency back-up power. My many thanks to WD4KPD - Dave and WN4Z-AB for the many hours and ideas that they have contributed in making this repeater enjoyable to all who use it. (Carl N4JEH)

Roanoke Division Convention Mar. 16-17

The ARRL Roanoke Division Convention will be held in conjunction with the Charlotte Hamfest and Computer Show on March 16 and 17. The event will be held in the spacious Charlotte (NC) Civic Center in downtown Charlotte. Many special seminars, shows and events are scheduled for that weekend.

Stubby *by Fred Hurteau, WD4SKH*


WELL, HE FINALLY WENT AND DID IT!! HE GOT HIM A DURN COMPUTER! NOW I'LL NEVER SEE HIM AGAIN. HE'LL BE TOO BUSY WITH THAT COMPUTER. MY BATTERIES WILL RUN DOWN AND CORRODE. I'LL NEVER GET TO SEE MY FRIENDS. HE'LL FORGET I EVEN EXIST. WHAT AM I GONNA DO?
KI4FJ, N4BYU, MY PRINTER IS DOING WEIRD STUFF! HELP! WB4GIL, WD4HMA, K4YNY, YOU GUYS AROUND? I CAN'T GET THIS PROGRAM TO LOAD! THIS IS WD4SKH. ANYBODY AROUND THIS EVENING?...... ....THIS IS WD4SKH. ANYBODY ON THE REPEATER KNOW ANYTHING ABOUT A COMMODORE?
SEE THERE!! I TOLD YOU HE COULDN'T GET ALONG WITHOUT ME!! IT'S NICE TO BE NEEDED.

Area Amateur Examination Schedules

(Editor's Note: Here are Amateur Examination schedules which have been reported to the Repeater Journal. We intend to set aside space as necessary each issue to publish in brief form, ALL exam schedules we receive for the CVRA-SERA area. VE groups and VECs are invited to send their schedules to the editor. Deadline for insertion in the May Repeater Journal is April 1.)

VIRGINIA EXAMS

ARRL VEC teams

March 23	**Richmond**
March 16	**Hampton Roads**
May 4	**Hampton Roads**
May 25	**Richmond**
June 15	**Portsmouth**
July 20	**Richmond**
July 27	**Virginia Beach**

Cutoff dates are 30 days prior to examination date. Richmond exams, contact E. Mac Crush, WB4UOI, 9302 Ledbury Road, Richmond, Va. 23229. 610 form and $4.00 to ARRL/VEC required, photocopy current license.

For Hampton Roads area, March exam, contact KE4BW, Ed Bloomhower, (804) 487-6526. May exam, contact WG4O, James Duke, (804) 868-8712. June exam, WB4BAB, George Parsons, (804) 489-4559. For July exam, KA4UNC, Tom Weikel (804) 340-7697. Exams are sponsored by area clubs in the respective locations.

TENNESSEE EXAMS

Tenn. VE Group-WCARS/VEC

Mate	Cutoff	Location
March 17	**Mar. 9**	**Knoxville**
April 13	**Apr. 6**	**Clinton**
May 25-26	**May 18**	**Knoxville**
June 15	**June 8**	**Knoxville**

Preregistration consists of form 610, copy of present license, check for $4.00 payable to WCARS/VEC to Ray Adams, VE Contact, 4325 Felty Drive, Knoxville, Tn. 37918. (615) 688-7771. Further information may be obtained by writing or calling Ray.

NORTH CAROLINA EXAMS

Piedmont VE Group, WCARS/VEC

Date	Cutoff	City
April 20	**April 13**	**W-S**
May 18	**May 4**	**Raleigh**
June 15	**June 1**	**Greensboro**
August 3	**July 20**	**Raleigh**
Sept. 14	**Aug 31**	**Greensboro**

SASE to appropriate VE contact in city of exam origin required. Photocopy of current license, 610 form completed mailed prior to cutoff date. Include $4.00 check to WCARS/VEC.

For more information contact: (Raleigh) John Johnson, WM4P, 2118 Lyndhurst Dr., Raleigh, N.C. 27610 (919) 834-5001. (Greensboro) Walt Thompson, WV4K, 2505-A Patriot Way, Greensboro, N.C. 27408 (919) 288-8119. (Winston-Salem) Derek Brown, WF4I, 1901 Brantley St., Winston-Salem, N.C. 27103. (919) 724-1244.

TEARC/VEC sponsors
February 23 - Walk-in - Lexington,

At City Rec. Center, 9 a.m. to 12 noon, walk-in. Extra class code 9 a.m., 13 wpm at 9:30 a.m. All grades exams. $4.00 payable TEARC/VEC. Completed 610, orig. license and proper I.D.

WEST VIRGINIA EXAMS

Bluefield Exam Team

May 4 .... Pre-reg & Walkin Bluefield

VE teams request pre-registration as much as possible with 610 form and $4.00, payable ERARC, however walkin exams willbe accepted. Cutoff for pre-reg. is April 21. For more info write: Bluefield VE, C/O ERARC, 2113 Hemlock Hill, Bluefield, WV 24701.

SOUTH CAROLINA EXAMS

SCARS VEC-SC VE Group
For Information contact:

John Chism, ND4N
P.O. Box 6751
Greenville, SC 29606

Gene Owensby, WB4ZBZ
P.O. Box 10242
Charleston, SC 29411

Exam Date	Close Date	City
March 2	**Walk-in**	**Greenville**
April 6	**Mar. 31**	**Charleston**
May 4	**Walk-in**	**Greenville**
July 6	**Walk-in**	**Greenville**
Sept. 7	**Walk-in**	**Greenville**
Nov. 2	**Walk-in**	**Greenville**
Others:		
June 1	**May 2**	**Clemson Univ**

For information Contact: C.H. Merrell, W4FX, Rt. 13, Box 190, Anderson, S.C. 29624. (ARRL-VEC). Enclose SASE with correspondence.

A Note of Caution

It is highly recommended that persons wishing to take exams make it a point of contacting persons sponsoring exams early to get complete information for proper registration. All pre-registrations will require a check of $4.00, a completed 610 form, and a photocopy of your current license. When appearing for exams (preregistered) applicants should bring proper identification, and their original current amateur license. (For walk-in) In addition to original license and identification, bring completed 610 form and your checkbook.

GEORGIA EXAMS

March 16, 8 a.m. at Red Cross Building Augusta, S.C. For information contact KO4N (address in callbook) (ARRL-VEC sponsored)

ALABAMA EXAMS

Central Ala. VEC Group

March 21	**Selma High School**
April 18	**Selma High School**

For more information and further schedules, contact CAVEC, Tom Ingram, K4OOV, Chairman, 606 Tremont Street, Selma, Ala. 36701.

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Volunteer Examiner Coordinator List

The following is an updated list of the official VECs for the 4th and 8th Call District. These VECs have numerous VEs (volunteer examiners) administering Amateur exams across CVRA-SERA territory.

All Callsign Regions

ARRL/VEC - 225 Main Street, Newington, Ct. 06111

W5YI/VEC - P.O. Box #10101, Dallas, Tx. 75207

Fourth Call Area

Central Alabama VEC (CAVEC) 606 Tremont St., Selma Ala. 36701

Mid-South VEC, 2020 St. Elmo, Memphis, Tn. 28213

Western Carolina ARS (WCARS/VEC) P.O. Box 16189, Asheville, N.C. 28816

Charlotte VEC, 227 Bennett Lane, Charlotte, N.C. 28213

Triad Emergency ARC (TEARC/VEC) 3504 Stonehurst Pl., High Point, N.C.

Eighth Call Area

Dayton ARA (DARA/VEC) P.O. Box 44, Dayton, Ohio 45401

In The fourth call area, (Region 4), VECs ARRL, Cen. Ala, WCARS and Triad have conducted 20 sessions, administering 610 exams elements. A total of 257 elements were passed for a 42% pass percentage. (adapted from W5YI)

Charlotte Observer Marathon Communications

—by Paul Reynolds, WB4MCI

The Charlotte Amateur Radio Club W4CQ along with assistance from the Union County Amateur Radio Society (UCARS) provided communications during the Charlotte Observer Marathon January 5th, 1985. This involved 28 amateurs who put in their own time for this big event. It required covering three races; the Fun Run (1 mile), the 10-Kilometer (6.2 miles), and the Marathon (26 miles). The communications were organized by Paul Reynolds WB4MCI, Charlotte ARC President. Net control was run by Paul and his wife Thelma WA4JLW. Communications with the Charlotte Police, the lead car, was done through Bill Dunlap WA4FKY; MEDIC, Patrick, Voswinkel WD4CFZ; WSOC-TV (who covered the event live) Mike Young KA4VUK; Pick-up vans Jeff Cloud W4USH; Bob Doran K2VJG, Buck Escott WB4OTP, and Wray Ware WB4BQG; Jim Harper WD4LGJ covered the finish line. At the Aid Stations were Carolyn Bodenhamer KA4AVL, Robert Bodenhamer WA4TIJ, Lewis Cloninger KF4TJ, Ike Cobb JA4M, Dave Denyer KA4EYY, Ron Durie WB400A, WIlford Eury WD4BEL, Dave Immel KE4EW, Dave Jenkins K4COG, Jim Lawson KF4KC, Buster Pilker W4YVZ, Jim Pilker KK4N, Dean Prevett WU4A, Bob Price KB4BVH, Nestor Ravenna KI4UD, Doug Tharp N9DMH, and Mike Titus KB4ABZ.

Traffic passed involved the placement of lead runner, pick-ups, supply of cups and Gatorade, if doctors were present at the the aid stations, and any emergency situation.

The communications went smoothly. Both the race officials and Harold Johnson (WSOC-TV Sprots Commutator) were impressed. The club received good PR through a newspaper article and a big thank you from a full page ad listing the names of the club members and other organizations.

After the net closed everybody met at a local restaurant for food and relaxation. Everybody said that they enjoyed it and were looking forward to next year.

Thanks go out to Ron Durie WB400A, UCARS President, for rounding up help from his club.

Novice Kits Available!

In cooperation with the Repeater Journal, Walt Thompson, WV4K of Greensboro is offering a complete novice test kit for Amateurs wishing to give Novice exams. The kit is free of charge. All you have to do is write Walt and enclose a S.A.S.E. with 37¢ postage affixed and he will return the goodies to you.

Included in the kit will be:

(1) FCC Regulations fact sheet. (2) Novice Exam (3) Answer Sheet (4) Answer Key and (5) Modified FCC 610 form

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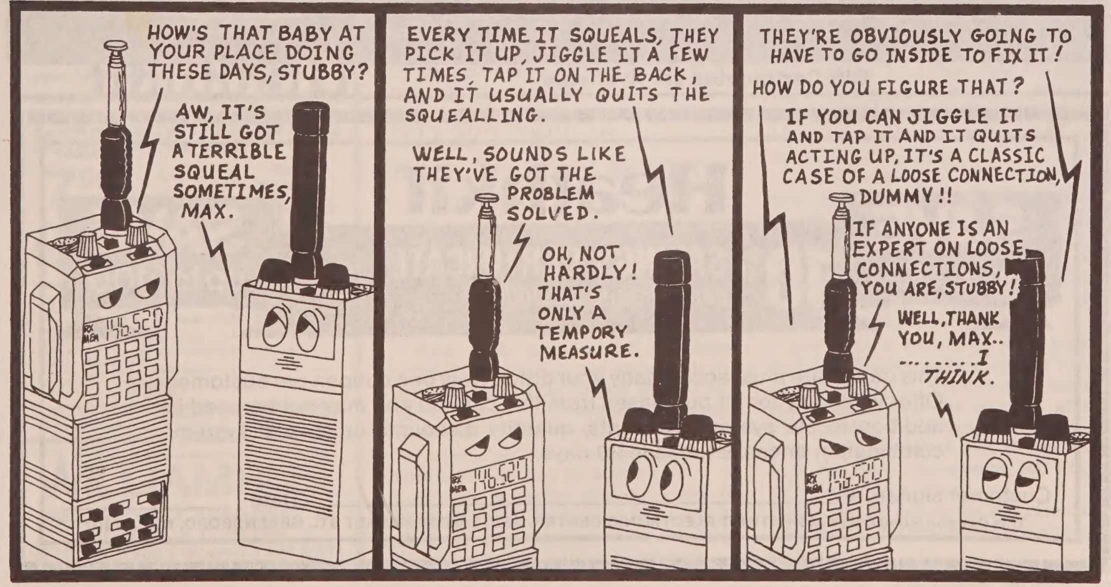
Greensboro, N.C. 27408

Be sure to enclose a S.A.S.E. with 37¢ postage affixed for this very valuable service provided by Walt.

Stubby *by Fred Hurteau, WD4SKH*


HOW'S THAT BABY AT YOUR PLACE DOING THESE DAYS, STUBBY?
AW, IT'S STILL GOT A TERRIBLE SQUEAL SOMETIMES, MAX.
146.520
EVERY TIME IT SQUEALS, THEY PICK IT UP, JIGGLE IT A FEW TIMES, TAP IT ON THE BACK, AND IT USUALLY QUITS THE SQUEALLING.
WELL, SOUNDS LIKE THEY'VE GOT THE PROBLEM SOLVED.
OH, NOT HARDLY! THAT'S ONLY A TEMPORY MEASURE.
146.520
THEY'RE OBVIOUSLY GOING TO HAVE TO GO INSIDE TO FIX IT!
HOW DO YOU FIGURE THAT?
IF YOU CAN JIGGLE IT AND TAP IT AND IT QUITS ACTING UP, IT'S A CLASSIC CASE OF A LOOSE CONNECTION, DUMMY!!
IF ANYONE IS AN EXPERT ON LOOSE CONNECTIONS, YOU ARE, STUBBY!
WELL, THANK YOU, MAX.. ....I THINK.
146.520

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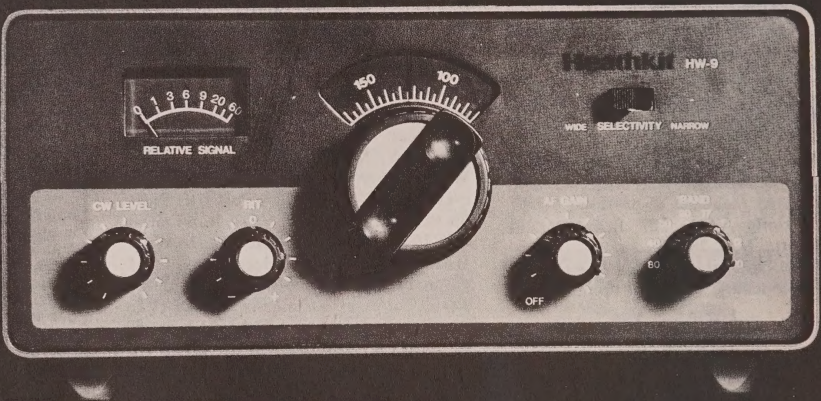
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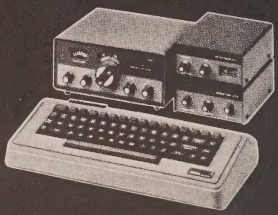

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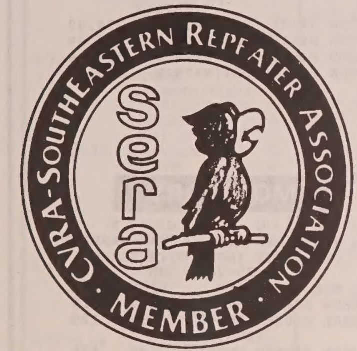
The Decals Are Here!

—by David Ward, KA4LVO

After two years of talking about it and five months of negotiations, we finally have available to SERA members decals of the organization's logo. This attractive four-color decal is 3" in diameter, and its rear adhesive design allows you to place it on your car, radio equipment, or whatever you please. The clear background is surrounded by a black circle containing our full name in yellow letters. Inside the circle is the four-letter acronym 'SERA' in black and yellow letters, along with the symbolic green and yellow parrot.



To get your decals, send a self-addressed **stamped** envelope along with 50¢ each to: SERA Decals, P.O. Box 5655, Greensboro, NC 27435-0655. Decal requests without a stamped return envelope cannot be processed.

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Earns Private Pilot License

Gwyn Armfield (KA4SJV) earned his private pilot license, the second major step on his way to an aviation career. To qualify for private pilot, Armfield had to accumulate over 40 hours of flight time, at least 20 of them solo, and half those were cross-country flights. He then had to pass a stiff written exam and a flight test. Holli Nelson (KB4AKM), a Federal Aviation Administration Designated Pilot Examiner, examined Armfield for his Private Pilot Certificate and issued the license.

Armfield received most of his flight training with the help of Civil Air Patrol; he is the cadet commander of the Winston-Salem CAP Squadron. He started flying when he was 15, soloed at 16, and got his private license at 17 — youngest the law allows.

Gwyn, now 17 and a general class licensee, started hamming with a novice license at the age of 13. He has been interested in radios and airplanes since he was 4, or before, according to Marcia Nelson (KB4ECQ), who first knew him as his kindergarten teacher. He has been active on the low bands both in CW and on phone. Currently, other activities have restricted his hamming to 2 meters and in support of his CAP and exploring functions. He is a member of ARES of Forsyth County and operates a CAP radio station (Red Dog 373).

He is also active in Exploring, the young adult division of the Boy Scouts of America, currently serving as chairman of the Old Hickory Council Explorer Officer Association. He looks forward to a career in the USAF and hopes to attend the Air Force Academy after graduating from R. J. Reynolds High School in Winston-Salem in 86.

STI 220 Petition Back On Front Burner

—by Wayne C. Williams, K4MOB

In a surprise note to this editor, the FCC resolved the difficulties which Sideband Technologies, Inc. (STI) had experienced and gave them a Petition for Rulemaking on their request for reallocation of 216 to 222 Mhz.

What really galled myself and most other 220 enthusiasts, the announcement about RM4831 came AFTER the date due for comments. The original comments were to have been filed by December 18. We learned about it December 22. Reply comments were due on January 3rd.

We have no further word as to what is happening with this piece of Rulemaking. (If any word does arrive prior to publishing this issue, we will get it in somewhere).

TENNESSEE TID BITS

by J. Tom Park, WD4KWP

For many years Dave Wolfe, WA4VVX has held the often thankless job of trying to keep up with repeaterdom in West Tennessee. Unfortunatly for all of us, Dave has been transferred to Nashville, so he will no longer be able to fuction as the assistant coordinator for that area. Dave, thanks for the many years of service!

(We are glad to have you in Middle, Tenn.)

• • •

The fall repeater building season has certainly been a good one here in Tennessee. (You can always tell by the number of requests for coordination that come in!) Between mid-october & Christmas I have had calls & letters from almost 30 people asking for info. This may not seem like much but the paper is getting deep around my computer (& this world is still run on paperwork.)

• • •

Most people don't realize it, but the 2 meter band is almost full in Tenn. Anywhere near the 6 metropolitan areas it is very close to impossible to find anything. If you are considering a new machine, please think about 220 or 440, maybe even 6 meters. There is good equipment & a good time to be had on all 3 of these lesser used bands.

• • •

If any of you would like to help with a repeater on a strange band like 6 meters or maybe even on microwave, drop me a line. I'll be glad to pass on the names of people that have said they could use a hand.

Full Membership Renewals Mailed in November

Full membership renewals were mailed to all Full Members on file from the 1984 year, in mid November. Vice-President, Jim Fitzgerald provided a list of 125 names and addresses of non-member repeaters which were affixed to applications and included in the mailing.

A total of 669 letters were placed in the mail. This is one of the most complete coverage mailings that Full Membership had done several years. In addition, a Full Memberhip application was printed in the November Journal to provide any "non" member repeaters an opportunity t join CVRA-SERA as Full Members.

Any repeater owner who did not get a Full Membership application and wishes to join as a Full Member may use the application printed on page 12 of the November, 1984 Repeater Journal, or write to CVRA-SERA Full Membership, P.O. Box 5655, Greensboro, NC 27435-0655 for an application.

It would be nice to see new records of membership this year in our organization. (editor)

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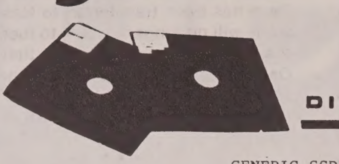

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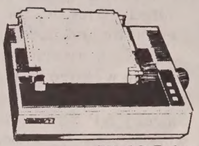

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" "	" " "	158'	3.50	41.00
" "	8500/8500B/1550/1550B/8023A	114	5.50	64.00
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"	" "	222	2.50	28.00
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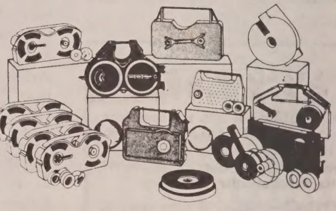

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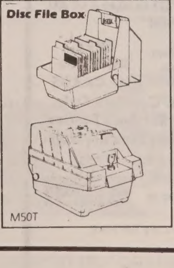

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	NEW BERN	NC
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	GRNVLE/CSRS HD	SC
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	BROMLEY MT	VA
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	LYNCHBURG	VA
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6.025/6.625	LAURINBURG	NC
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6.04 /6.64	AUGUSTA	GA
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	MARION	VA
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	ALEXANDRIA	VA
	ALTAVISTA	VA
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	BURLINGTON	NC
	FOREST CITY	NC
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	LAFOLLETTE/WMT	TN
	NASHVILLE S.W.	TN
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	WILLIAMSBURG	VA
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	NEWBERRY	SC
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	NORFOLK	VA
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	DYERSBURG	TN
	ROANOKE/POOR MT	VA
6.16 /6.76	ASHVL/MT PISGAH	NC
	GREENSBORO	NC
	SWANSBORO	NC
	WILSON	NC
	CHARLESTON	SC
	FT JACKSON	SC
	BRISTOL/HLSTN MT	TN
	NASHVILLE	TN
	CHARLOTTESVILLE	VA
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6.175/6.775	CHARLOTTE	NC
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6.19 /6.79	PIKEVILLE	EKY
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	CLINTON	NC
	SAURATOWN MT	NC
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	REIDSVILLE	NC
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	GTLBG/COVE MTN	TN
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	SHELBY	NC
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	MEMPHIS	TN
	NASHVILLE	TN
	OAK RIDGE	TN
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	RICHMOND	VA
	SALEM	VA
	CHARLESTON	WV
6.295/6.895	MADISON	NC
	WAXHAW	NC
6.31 /6.91	MOREHEAD	EKY
	AHOSKIE	NC
	ASHVL/SPIVEY MT	NC
	FAYETTEVILLE	NC
	LEXINGTON	NC
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	SAVANNAH	TN
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	JONESVILLE	VA
	MT. LK/BALD KNB	VA
	TYSONS CORNER	VA
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	RIPLEY	WV
6.325/6.925	ROCK HILL	SC
	CHARLOTTESVILLE	VA
	DANVILLE(DCC)	VA
6.34 /6.94	BURGAW	NC
	CHARLOTTE	NC
	DURHAM	NC
	MANTEO	NC
	MT AIRY-RTTY	NC
	COLUMBIA	SC
	GREER	SC
	N. AUGUSTA	SC
	KNOXVILLE	TN
	MEMPHIS	TN
	NASHVILLE	TN
	HAMPTON	VA
	RICHMOND	VA
	ROANOKE	VA
	NEW MARTINSVLLE	WV
	RICHWOOD	WV
	WEIRTON	WV
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	MT AIRY	NC
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	MEDINA	TN
	OAK RIDGE	TN
	MANASSAS	VA
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	VIRGINIA BEACH	VA
	LOGAN	WV
	PARKERSBURG	WV
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	ALBEMARLE	NC
	OLD FORT	NC
	MT PLEASANT	SC
	ROANOKE/POOR MT	VA

REPEATERS BY FREQUENCY CONTINUED

6.40 /7.00	HIGH POINT	NC
	JACKSONVILLE	NC
	MARION	SC
	PICKENS	SC
	MEMPHIS	TN
	SUFFOLK	VA
	ST ALBANS	WV
7.60 /7.00	HIGH POINT	NC
	BLOUNTVILLE	TN
	CHATT/SIGNAL MT	TN
	CLARKSVILLE	TN
	HAYSI	VA
	TERRA ALTA	WV
7.615/7.015	LK NORMN/CLT	NC
	SUMTER	SC
	NASHVILLE	TN
	FREDRICKSBURG	VA
6.43 /7.03	ROCK HILL	SC
	LEXINGTON	TN
	MILLINGTON/NB	TN
	RICHMOND	VA
7.63 /7.03	GREENSBORO	NC
	ROANOKE RAPIDS	NC
	MYRTLE BEACH, N	SC
	FAYETTEVILLE	TN
	MEMPHIS	TN
	MORRISTOWN	TN
	WAYNESBORO	VA
	MULLENS	WV
	ST MARYS/BENS R	WV
6.445/7.045	FAYETTEVILLE	NC
	HOPE MILLS	NC
	ROBBINSVILLE	NC
	YOUNGSVILLE	NC
	ARLINGTON	VA
7.645/7.045	STATSVL/ASBRY MT	NC
	LEBANON	TN
	RADFORD	VA
	STAUNTON/EL. KB	VA
	VIRGINIA BEACH	VA
6.06 /7.06	MADISON	WV
6.46 /7.06	CHARLOTTE	NC
	MEMPHIS	TN
	SOUTH BOSTON	VA
	PRINCETON	WV
7.66 /7.06	MACO	NC
	SUMTER	SC
	GREENEVILLE	TN
	SHELBYVILLE	TN
	CHESTERFLD CO	VA
	POINT PLEASANT	WV
6.475/7.075	BURLINGTON	NC
7.675/7.075	LANIER MT/SNLV	GA
	BURLINGTON	NC
	GOOSE CREEK	SC
	KNOXVILLE	TN
	WAYNSBR/AFTON MT	VA
7.69 /7.09	GREENVL/ESTN NC	NC
	ORANGEBURG	SC
	SPARTANBURG	SC
	MEMPHIS	TN
	SPARTA/BON AIR	TN
	GALAX/BRIRP MT	VA
7.705/7.105	BLAIRSVILLE	GA
	MARION/BEAR WLW	NC
	MONROE/UCARS	NC
	NASHVILLE	TN
	BEDFORD	VA
6.09 /7.11	LOGAN	WV
7.72 /7.12	AUGUSTA	GA
	GAST/SPCR MT	NC
	ROCKY MOUNT	NC
	MYRTLE BEACH	SC
	MEMPHIS	TN
	OAK RIDGE	TN
	CULPEPPER	VA
	BRIDGEPORT	WV
	DUNBAR	WV
7.735/7.135	DALTON	GA
	BREVARD/TRNS CTY	NC
	CHERAW	SC
	GALAX/FRIES	VA
	RICHMOND	VA
7.75 /7.15	ALBANY	GA
	MORGANTON	NC
	RALEIGH	NC
	SIMPSONVILLE	SC
	MEMPHIS	TN
	NASHVILLE	TN
	OAK RIDGE	TN
	TAZEWELL	VA
	MCMECHEN	WV
	ST ALBANS/COAL	WV
7.765/7.165	HIGH POINT	NC
	GREENWOOD	SC
	NEWPORT NEWS	VA
	WARRENTON	VA
7.78 /7.18	AUGUSTA	GA
	SANFORD	NC
	WILMINGTON	NC
	FT MILL/CAROWND	SC
	GOOSE CREEK	SC
	CLEVELAND	TN
	MEMPHIS	TN
	NASHVILLE	TN
	DUBLIN	VA
	PETERSBURG	VA
	LEON	WV
7.795/7.195	LAKE TOXAWAY	NC
	LYNCHBURG	VA
7.81 /7.21	DALTON	GA
	GREENSBORO	NC
	WHITEVILLE	NC
	LITTLE MT.	SC
	COOKEVILLE	TN
	JACKSON	TN
	MCLEAN	VA
	WISE/HIGH KNOB	VA
7.825/7.225	HILLSBOROUGH	NC
	MORRISTOWN	TN
	YORKTOWN	VA
7.84 /7.24	CARTHAGE	NC
	EDEN/MAYODAN	NC
	FOREST CITY	NC
	FRANKLIN	NC
	HILTON HEAD	SC
	LANCASTER	SC
	PROSPERITY	SC
	GALLATIN	TN
	MEMPHIS	TN
	PETERSBURG	VA
	WOODBRIDGE	VA
7.855/7.255	ASHEBORO	NC
	HENDSVL/STONY MT	NC
	ACCOMAC	VA
	MARTINSBURG	WV
7.87 /7.27	DAMRON MTN	EKY
	PIKEVILLE	EKY
	BENSON	NC
	WAYNESVILLE	NC
	CHARLESTON	SC
	SENECA/LONG MT	SC
	GALLATIN	TN
	JOHNSON CITY	TN
	MEMPHIS	TN
	GUM SPRING	VA
	SCOTT DEPOT	WV
7.885/7.285	AIKEN	SC
	ROCKY SPUR	SC
	PIKEVILLE	TN
	MARTINSVILLE	VA
7.90 /7.30	JACKSONVILLE	NC
	TUCKASEGEE	NC
	CHARLESTON	SC
	KNOXVILLE	TN
	MEMPHIS	TN
	NASHVILLE	TN
	CLIFTON FORGE	VA
	FRANKLIN	VA
	WINCH/BLUEMONT	VA
	HARRISVILLE	WV
	HUNTINGTON	WV
7.915/7.315	UNION CROSS	NC
	ALEXANDRIA	VA
7.92 /7.32	GRUNDY	VA
7.93 /7.33	TOCCOA	GA
	FAYVLLE/FT BRAGG	NC
	LENOIR/HIBRITN	NC
	COVINGTON	TN
	CROSSVILLE	TN
	NASHVILLE	TN
	LEXNGTN/COLE MT	VA
	WARSAW	VA
7.945/7.345	LYNCH/BLACK MT	EKY
	SHELBY	NC
	WASHINGTON	NC
	HENDERSONVILLE	TN
	GATE CITY	VA
	FRANKLIN	WV
7.95 /7.35	DANVILLE	VA
7.96 /7.36	BOONE/RICH MTN	NC
	LUMBERTON	NC
	COLUMBIA	SC
	KNXVL/CROSS MT	TN
	MEMPHIS	TN
	NASHVILLE S.	TN
	PARIS	TN
	CHESTERFIELD	VA
7.975/7.375	BURNSVILLE	NC
	GREENVILLE	NC
	HILLSVILLE	NC
	GEORGETOWN	SC
	HILLSVILLE	VA
	LYNCHBURG	VA
	NEWPORT NEWS	VA
	GRAFTON	WV
	ST ALBANS	WV
7.99 /7.39	CHARLOTTE	NC
	EDEN/STONEVILLE	NC
	SMITHFIELD	NC
	LEXINGTON	SC
	DAYTON/RHEA CTY	TN
	GALLATIN	TN
	MEMPHIS	TN
	MADISON	VA
	PETERSBURG	VA
	MONTGOMERY	WV
	PARKERSBURG	WV
5.00 /7.50	CHARLOTTE	NC
6.19 /7.51	MEMPHIS	TN
6.055/7.655	ELIZABETH CITY	NC
7.135/7.735	ALAMO	TN
7.225/7.825	ATHENS	GA
7.285/7.885	BIRMINGHAM(ALA)	TN
7.30 /7.90	MONROE	NC
7.315/7.915	DALTON	GA
6.355/7.955	EAST RIVER MNT	WV
7.375/7.975	ATHENS	GA
	GREENVILLE	SC
5.23 /ET	HAMPTON	VA
220 MHZ		
2.12 /3.72	STERLING PK	VA
2.30 /3.90	COLUMBIA	SC
	HERMITAGE	TN
2.32 /3.92	HIGH POINT	NC
2.34 /3.94	ASHVL/MT PISGAH	NC
	HILLSBOROUGH	NC
	CLARKSVILLE	TN
	MEMPHS/FRAYSER	TN
2.36 /3.96	ROCKY MOUNT	NC
2.38 /3.98	LINWOOD	NC
	GALLATIN	TN
2.40 /4.00	LOCUST	NC
	PETERSBURG	VA
2.42 /4.02	FAYETTEVILLE	NC
	HICKORY	NC
	NASHVILLE	TN
2.46 /4.06	EASLEY/SASFRS MT	SC
2.48 /4.08	NASHVILLE	TN
2.50 /4.10	FAIRFAX	VA
2.52 /4.12	LEXINGTON	SC
2.54 /4.14	PICKENS/CSRS HD	SC
	FRANKLIN	TN
	HUNTINGTON	WV
2.56 /4.16	LENOIR/HIBRITN	NC
2.62 /4.22	NASHVILLE	TN
2.70 /4.30	STATESVILLE	NC
2.74 /4.34	GALAX/MT LKOUT	VA
2.80 /4.40	CHARLOTTE	NC
2.86 /4.46	KNOXVILLE	TN
2.90 /4.50	KNOXVILLE	TN
2.94 /4.54	MT MITCHELL	NC
3.00 /4.60	ASHEVILLE	NC
3.04 /4.64	RALEIGH	NC
	WINSTON-SALEM	NC
3.08 /4.68	LK NORMN/CLT	NC
3.10 /4.70	WSTFLD/SAUTN MT	NC
3.12 /4.72	TYSONS CORNER	VA
3.14 /4.74	KINGSTON/LICK KB	WV
3.16 /4.76	SALISBURY	NC
	DAN/WHT OAK	VA
3.18 /4.78	CHATTANOOGA	TN
3.20 /4.80	MORGANTON	NC
3.22 /4.82	GIBSONVILLE	NC
	KNOXVILLE	TN
	ALEXANDRIA	VA
3.28 /4.88	DALTON	GA
	WSTFLD/SAUTN MT	NC
3.30 /4.90	CHATT/SIGNAL MT	TN
3.32 /4.92	CHAPEL HILL	NC
3.34 /4.94	ROSSVILLE	GA
	GREENEVILLE	TN
	ROANOKE/POOR MTN	VA
3.36 /4.96	CHERRYVILLE	NC
	GOLDSBORO	NC
3.38 /4.98	FALLS CHURCH	VA
440 MHZ		
9.25 /1.25	LEXINGTON	SC
9.25 /6.25	NORFOLK	VA
9.25 /6.27	ALEXANDRIA	VA
9.25 /7.25	SHELBY	NC
	CHATT/SIGNAL MT	TN
7.00 /2.00	PICKENS/CSRS HD	SC
	WINCHESTER	VA
7.05 /2.05	MEDINA	TN
7.10 /2.10	MILAN	TN
7.25 /2.25	COVINGTON	VA
7.50 /2.50	KNOXVILLE	TN
	ROANOKE/POOR MT	VA
7.70 /2.70	ROANOKE	VA
7.75 /2.75	ROANOKE	VA
7.80 /2.80	FRANKLIN	TN
	MEMPHIS	TN
7.90 /2.90	HIGH POINT	NC
8.00 /3.00	MEMPHIS	TN
8.10 /3.10	LYNCH/BLACK MT	EKY
8.30 /3.30	GATLBG/COVE MT	TN
8.40 /3.40	MEMPHIS	TN
8.50 /3.50	SAURATOWN MT	NC
	PARIS/GROVE HL	TN
	TYSONS CORNER	VA
8.55 /3.55	WILKESBORO	NC
8.65 /3.65	MT MITCHELL	NC
	HAMPTON	VA
8.70 /3.70	LOCUST	NC
8.75 /3.75	ALAMO	TN
	FINCASTLE	VA
8.30 /3.80	MANASSAS	VA
8.80 /3.80	NORTHWEST/SE VA	VA
8.875/3.875	CHAPEL HILL	NC
	CAESARS HEAD	SC
8.90 /3.90	SALUDA	VA
8.95 /3.95	WILLIAMSBURG	VA
9.00 /4.00	RICHMOND	VA
9.05 /4.05	WAYNSBR/AFTON MT	VA
9.10 /4.10	DURHAM	NC
	COLUMBIA	SC
	CHATTANOOGA	TN
9.15 /4.15	ATLANTA/BELL	GA
	N. AUGUSTA	SC
	LEXNGTN/COLE MT	VA
	SPRINGFIELD	VA
9.20 /4.20	AHOSKIE	NC
	MORRISTOWN	TN
9.25 /4.25	CHARLOTTESVILLE	VA
9.30 /4.30	FISHERVILLE	TN
	HOOVER(ALA)	TN
	KNOXVILLE	TN
	WAYNESBORO	VA
9.35 /4.35	GALLATIN	TN
	APPLE ORCH MT	VA
9.40 /4.40	FAYETTEVILLE	NC
	OAK RIDGE	TN
9.45 /4.45	GALLATIN	TN
	FALLS CHURCH	VA
9.50 /4.50	MEMPHIS	TN
	LYNCHBURG	VA
9.55 /4.55	NASHVILLE	TN
	ALBERTA	VA
9.60 /4.60	CHARLOTTE	NC
	KNOXVILLE	TN
	ALEXANDRIA	VA
9.65 /4.65	WILLIAMSTON	NC
	GREENEVILLE	TN
	RICHMOND	VA
9.675/4.675	NASHVILLE	TN
9.70 /4.70	ROCKY MOUNT	NC
	WILMINGTON	NC
	MT PLEASANT	SC
	KNOXVILLE	TN
	MORGANTOWN	WV
9.735/4.735	DALTON	GA
9.75 /4.75	ROCK HILL	SC
	TYSONS CORNER	VA
9.775/4.775	NASHVILLE	TN
9.80 /4.80	GREENVILLE	NC
	MEMPHIS	TN
	BECKLEY/EOC	WV
	MORGANTOWN	WV
9.825/4.825	STAUNTON	VA
9.85 /4.85	CHARLOTTE	NC
	PETERSBURG	VA
9.875/4.875	NASHVILLE	TN
8.90 /4.90	CHESAPEAKE	VA
9.90 /4.90	ASHVL/MT PISGAH	NC
	FAYETTEVILLE	NC
	GREENSBORO	NC
	WILSON	NC
9.95 /4.95	SUMTER	SC
	VIRGINIA BEACH	VA
9.975/4.975	NASHVILLE	TN
3.80 /8.80	SUMMERVILLE	SC
4.225/9.225	MANASSAS	VA
4.40 /9.40	MEMPHIS	TN
4.90 /9.90	WOODBRIDGE	VA
4.925/9.925	WINCH/BLUEMONT	VA
2.01 /ACON	FISHERVILLE	TN

CVRA-SERA REPEATER INDEX LISTINGS BY CITY-BY-STATE

NORTH CAROLINA REPEATERS

2 METERS

AHOSKIE	WB4YNF	144.53	145.13	N	A
AHOSKIE	WA4ZGQ	146.31	146.91	N	PA
ALBEMARLE	K4OGB	146.385	146.985		
ASHEBORO	WD4AIB	147.855	147.255		PAL
ASHEVILLE	WA4QCO	146.235	146.835		A
ASHVL/MT PISGAH	WA4BVW	146.16	146.76		
ASHVL/SPIVEY MT	W4MOE	146.31	146.91	D	PA
BENSON	AK4H	147.87	147.27		PA
BOONE/RICH MTN	WA4KDB	147.96	147.36		
BREVARD/TRNS CTY	N4GTG	147.735	147.135		
BURGAW	K4LZY	146.34	146.94		
BURLINGTON	WB4ZIN	146.07	146.67	D	A
BURLINGTON	W4VGZ	146.475	147.075	N	EA
BURLINGTON	WA4HBQ	147.675	147.075	N	EA
BURNSVILLE	WA4LLR	147.975	147.375	D	A
CARTHAGE	W4NIW	147.84	147.24		
CHARLOTTE	KE4ZC	144.57	145.17		
CHARLOTTE	W4BFB	144.63	145.23	D	
CHARLOTTE	WD4JWO	144.69	145.29	D	
CHARLOTTE	N4JEV	144.75	145.35		PA
CHARLOTTE	KA4HNP	145.00	147.50	N	NB
CHARLOTTE	W4BFB	146.175	146.775	D	R
CHARLOTTE	W4BFB	146.34	146.94	D	A
CHARLOTTE	W4CQ	146.46	147.06	N	A
CHARLOTTE	WD4PLY	147.99	147.39	D	PA
CLINTON	WA4LZD	146.19	146.79	N	
COLUMBIA	K4ITL	144.51	145.11	N	CL
CONCORD/KANNAP.	K4CEB	146.055	146.655		A
CROWDERS MT	WD4PLY	144.85	145.45	D	
DUNN	WB4FXM	146.10	146.70		PA
DURHAM	WA4WTX	144.85	145.45		
DURHAM	WA4BFT	146.34	146.94	N	A
EDEN/MAYODAN	WA4ACP	147.84	147.24		
EDEN/STONEVILLE	WA4QBG	147.99	147.39		
ELIZABETH CITY	WA4VTX	146.055	147.655		A
ELIZABETHTOWN	N4DHW	146.175	146.775	N	
FAYETTEVILLE	N4EWG	146.205	146.805		
FAYETTEVILLE	WB4YZF	146.31	146.91	D	
FAYETTEVILLE	WA4FLR	146.445	147.045		CR
FAYVLLE/FT BRAGG	W4LPL	147.93	147.33	D	
FISHERS PK/WS	W4HKB	144.87	145.47		P
FOREST CITY	W4TMT	146.07	146.67	N	A
FOREST CITY	WA4BKU	147.84	147.24	N	
FRANKLIN	W4GHZ	147.84	147.24		
FRNKLN/COWEE BLD	N4AC	144.89	145.49	D	
GAST/SPCR MT	W4REW	147.72	147.12	D	A
GASTONIA	K4NOQ	146.205	146.805		PA
GOLDSBORO	K4CYP	146.25	146.85		A
GREENSBORO	K4SNI	146.01	146.61	D	A
GREENSBORO	WA4MSS	146.16	146.76		
GREENSBORO	WD4IPZ	147.63	147.03		
GREENSBORO	W4BUZ	147.81	147.21	N	
GREENVILLE	WA4DAN	144.75	145.35		L
GREENVILLE	K4ROK	147.975	147.375		
GREENVL/ESTN NC	W4GDF	147.69	147.09		
GRIFTON	W4NBR	146.085	146.685	D	
HENDERSONVILLE	WB4YAO	146.04	146.64	N	L
HENDSVL/PINCK MT	WA4KNI	144.67	145.27		A
HENDSVL/STONY MT	WA4KNI	147.855	147.255		A
HICKORY/BRT. MT	WA4MDW	146.25	146.85	N	
HIGH POINT	N4XO	144.81	145.41	N	
HIGH POINT	NQ4T	146.40	147.00		LA
HIGH POINT	NQ4T	147.60	147.00		LA
HIGH POINT	KA4DHP	147.765	147.165		PA
HILLSBOROUGH	WA4WTX	147.825	147.225		A
HILLSVILLE	WD4BTS	147.975	147.375	N	A
HOPE MILLS	WB4TRW	146.445	147.045	N	
JACKSONVILLE	WD4FVO	146.40	147.00	D	PA
JACKSONVILLE	WR4ATW	147.90	147.30	N	
LAKE NORMAN	WB9GMO	144.75	145.35		A
LAKE TOXAWAY	K4MSK	147.795	147.195		
LAURINBURG	K4QWK	146.025	146.625		A
LENOIR/HIBRITN	KN4K	147.93	147.33		
LEWISVILLE	N4GGK	144.61	145.21		PA
LEXINGTON	K4IZM	146.31	146.91		PA
LILLINGTON	WA4FKI	144.87	145.47	N	
LK NORMN/CLT	WB4KPF	147.615	147.015		
LUMBERTON	WB4MDI	147.96	147.36		
MACO	WA4LED	147.66	147.06		
MADISON	KA4YFF	146.295	146.895		
MAGGIE VALLEY	W4HCY	147.405	146.805		
MANTEO	K4UOR	146.34	146.94		
MARION/BEAR WLW	KA4DEC	147.705	147.105		
MAYODAN	WV4J	144.55	145.15		
MONROE	KF4NJ	144.79	145.39		C
MONROE	K4BGU	147.30	147.90	N	NB
MONROE/UCARS	K4JCK	147.705	147.105		A
MOORESVILLE	N4JEV	144.75	145.35		PA
MORENTN/HI PK	WB4UDS	144.55	145.15	N	
MORGANTON	K4VLY	147.75	147.15		
MT AIRY	WA4ZAS	146.37	146.97		EA
MT AIRY-RTTY	WA4ZAS	146.34	146.94		R
MT AIRY/TRNR MT	KD4J	144.73	145.33	D	
MT MITCHELL	WA4BVW	144.59	145.19		
N. WILKESBORO	N4AGN	144.77	145.37		LPA
NAGS HEAD/BODIE	KE4PB	146.235	146.835	N	
NEW BERN	WD4JMS	146.01	146.61		A
NEWPORT	K4GRW	144.85	145.45	D	AL
OLD FORT	KA4ROZ	146.385	146.985		
OXFORD	N4EKK	144.57	145.17		
RALEIGH	N4BEA	144.67	145.27		PAL
RALEIGH	NW4B	144.79	145.39	N	C
RALEIGH	N4CBI	144.89	145.49		
RALEIGH	W4DW	146.04	146.64		
RALEIGH	K4BWC	146.13	146.73		A
RALEIGH	K4ITL	146.28	146.88		L
RALEIGH	K4ITL	147.75	147.15		PA
REIDSVILLE	K4YFT	146.25	146.85		
ROANOKE RAPIDS	K4PUV	147.63	147.03		
ROARING GAP	WB4PZA	146.22	146.82		
ROBBINSVILLE	WD4CNS	146.445	147.045		
ROCKINGHAM	WA4ULA	146.355	146.955	N	
ROCKY MOUNT	WB4WAA	147.72	147.12	D	A
SALISBURY	W4EXU	146.13	146.73		
SANFORD	WB4EJJ	147.78	147.18		A
SAURATOWN MT	W4RXG	144.51	145.11		R
SAURATOWN MT	NQ4T	146.19	146.79		
SHELBY	WD4DJA	146.28	146.88		
SHELBY	WD4DJA	147.945	147.345		PA
SMITHFIELD	KD4JQ	146.37	146.97		
SMITHFIELD	W4MKL	147.99	147.39	D	
SPARTA/GREEN MT	K4ITL	144.83	145.43		L
SPRING LAKE	WB4KDC	146.115	146.715	N	
STATESVILLE	AI4O	146.085	146.685		PA
STATSVL/ASBRY MT	WA4JRL	147.645	147.045	D	
SWANSBORO	KO4S	146.16	146.76		
THOMASVILLE	WD4LNW	147.435	146.835		A
TRENTON	K4ITL	144.61	145.21		L
TUCKASEGEE	W8OMV	147.90	147.30	N	
UNION CROSS	WA4RBW	147.915	147.315		
WADESBORO	WA4IAT	146.235	146.835		
WASHINGTON	WA4TEP	147.945	147.345		
WAXHAW	WB4OOA	146.295	146.895	N	PA
WAXHAW	WA4ZRS	147.465	146.865		A
WAYNESVILLE	N4SM	147.87	147.27	D	PA
WHITEVILLE	K4MSD	147.81	147.21		
WILLIAMSTON	KA4KNU	144.81	145.41		PA
WILMINGTON	W4VNK	146.13	146.73	D	EA
WILMINGTON	K4GMP	146.22	146.82	D	EA
WILMINGTON	N4CTJ	147.78	147.18	N	C
WILSON	WB4THL	146.16	146.76		
WINSTON-SALEM	WA4GIC	146.04	146.64		
YOUNGSVILLE	WD4AUI	146.445	147.045	N	

Repeater Indexes Have Been
Corrected as of January 22, 1985

220 MHZ

ASHEVILLE	NC4N	223.00	224.60	
ASHVL/MT PISGAH	WA4BVW	222.34	223.94	
CHAPEL HILL	K2MZ	223.32	224.92	N C
CHARLOTTE	KE4ZC	222.80	224.40	
CHERRYVILLE	WB4UDS	223.36	224.96	N
FAYETTEVILLE	W4EHF	222.42	224.02	
GIBSONVILLE	WB4IKY	223.22	224.82	R
GOLDSBORO	WD4OYO	223.36	224.96	N
HICKORY	WA4MDW	222.42	224.02	N
HIGH POINT	K4AZA	222.32	223.92	LA
HILLSBOROUGH	WA4WTX	222.34	223.94	L
LENOIR/HIBRITN	KN4K	222.56	224.16	
LINWOOD	KA4HUV	222.38	223.98	N
LK NORMN/CLT	WB4KPF	223.08	224.68	
LOCUST	WA4ZIA	222.40	224.00	PA
MORGANTON	WB4PML	223.20	224.80	N
MT MITCHELL	WA4BVW	222.94	224.54	
RALEIGH	WA4PEN	223.04	224.64	N
ROCKY MOUNT	KA4DAP	222.36	223.96	N
SALISBURY	W4EXU	223.16	224.76	
STATESVILLE	WA4PVI	222.70	224.30	
WINSTON-SALEM	WA4YHH	223.04	224.64	N
WSTFLD/SAUTN MT	W4RXG	223.10	224.70	R
WSTFLD/SAUTN MT	W4RXG	223.28	224.88	

440 MHZ

AHOSKIE	WB4YNF	449.20	444.20	N C
ASHVL/MT PISGAH	WA4COS	449.90	444.90	N
CHAPEL HILL	K2MZ	448.875	443.875	N C
CHARLOTTE	W4BFB	449.60	444.60	D
CHARLOTTE	W4CQ	449.85	444.85	N
DURHAM	WA4WTX	449.10	444.10	PA
FAYETTEVILLE	KB4ZW	449.40	444.40	
FAYETTEVILLE	KB4ZW	449.90	444.90	P
GREENSBORO	WB4HZI	449.90	444.90	N
GREENVILLE	AI4J	449.80	444.80	N
HIGH POINT	K4AZA	447.90	442.90	L
LOCUST	WA4LBT	448.70	443.70	
MT MITCHELL	N4DWU	448.65	443.65	
ROCKY MOUNT	N4JEH	449.70	444.70	
SAURATOWN MT	NQ4T	448.50	443.50	
SHELBY	WD4DJA	439.25	427.25	V
WILKESBORO	KC4XE	448.55	443.55	
WILLIAMSTON	KA4KNY	449.65	444.65	
WILMINGTON	KB4BR	449.70	444.70	
WILSON	NE4J	449.90	444.90	

10 METERS

CHAPEL HILL	K2MZ	29.54	29.64	N C
WILKESBORO	KC4XE	29.52	29.62	L

6 METERS

CARY	WR4AVP	52.35	53.35	N
CHARLOTTE	KE4ZC	52.03	53.03	
HENDERSONVILLE	WB4YAO	52.01	53.01	N NB
HENDERSONVILLE	WB4YAO	52.525	52.525	N RB
HICKORY	WA4MDW	52.47	53.47	N
NEWPORT	K4GRW	52.01	53.01	N P
ROANOKE RAPIDS	K4PUV	52.03	53.03	
STATESVILLE	WA4WRS	52.67	53.67	N

SOUTH CAROLINA REPEATERS

2 METERS

AIKEN	N4ADM	147.885	147.285	
ANDERSON	N4SZ	146.37	146.97	PA
ANDERSON/SAS MT	W4FVV	146.19	146.79	
BAMBERG	WA4DFP	144.73	145.33	N
CHARLESTON	WB4URP	144.65	145.25	N
CHARLESTON	K4ILT	146.16	146.76	N PA
CHARLESTON	W4IVE	146.19	146.79	N
CHARLESTON	WB4LET	147.87	147.27	PA
CHARLESTON	K4LWS	147.90	147.30	A
CHELSEA	KB4GY	146.01	146.61	
CHERAW	KA4ABW	147.735	147.135	
COLUMBIA	K4AVU	146.28	146.88	D
COLUMBIA	K4LNU	146.34	146.94	D
COLUMBIA	K4LNU	147.96	147.36	D PA
DILLON/PEE DEE	NN4N	146.145	146.745	EA
FLORENCE	W4ULH	145.01	PKET	D
FLORENCE	W4ULH	146.25	146.85	D A
FLORENCE	WA4ISM	146.37	146.97	PA
FT JACKSON	WB4OCB	146.16	146.76	
FT MILL/CAROWND	AA4SC	147.78	147.18	
GASTON	WB4NEP	144.61	145.21	PA
GEORGETOWN	WD4DMI	147.975	147.375	N
GOOSE CREEK	WD4NUN	147.675	147.075	A
GOOSE CREEK	W4NAT	147.78	147.18	N
GREENVILLE	W4AZT	146.10	146.70	A
GREENVILLE	K4LEO	147.375	147.975	NBT
GREENWOOD	KB4YF	147.765	147.165	PA
GREER	W4IQQ	146.34	146.94	N
GRNVLE/CSRS HD	W4NYK	146.01	146.61	
GRNVLE/PARIS MT	W4NYK	146.22	146.82	PA
HILTON HEAD	KB4GY	147.84	147.24	D P
HODGES	KB4YF	144.53	145.13	
INMAN	WD8OXE	144.87	145.47	D
LANCASTER	W4PAX	146.10	146.70	
LANCASTER	WB4BGF	147.84	147.24	
LAURENS	KA4LBI	146.25	146.85	N A
LEXINGTON	WR4AGK	147.255	146.835	N NB
LEXINGTON	KA4FEC	147.99	147.39	
LITTLE MT.	K4AVU	147.81	147.21	
MARION	W4YLT	146.40	147.00	N EA
MT PLEASANT	K4ESG	146.385	146.985	
MYRTLE BEACH	WD4JMT	146.01	146.61	D A
MYRTLE BEACH	WA4YGE	147.72	147.12	N
MYRTLE BEACH, N	WA4JYR	147.63	147.03	N PA
N. AUGUSTA	K4FKJ	146.13	146.73	
N. AUGUSTA	K4AUM	146.34	146.94	EA
NEWBERRY	KB4CO	146.085	146.685	
ORANGEBURG	WR4AQY	147.69	147.09	N A
PICKENS	WB4YXZ	146.40	147.00	
PROSPERITY	WB4OCB	147.84	147.24	
RKY RDG/WALLACE	KA4ABW	144.89	145.49	
ROCK HILL	KA4RFA	144.71	145.31	N LPA
ROCK HILL	K4YTZ	146.325	146.925	D PA
ROCK HILL	K4YTZ	146.43	147.03	D PA
ROCKY SPUR	KS4I	147.885	147.285	D
SENECA/LONG MT	WA4JRJ	147.87	147.27	N
SIMPSONVILLE	WA4LDP	146.13	146.73	
SIMPSONVILLE	WA4SDT	147.75	147.15	N R
SPARTANBURG	WD8OXE	147.69	147.09	D PA
SUMTER	WS4P	146.04	146.64	
SUMTER	WA4UMU	147.615	147.015	A
SUMTER	W4VFR	147.66	147.06	A
WHITE HALL	W4BWZ	146.31	146.91	D

220 MHZ

COLUMBIA	N4EOY	222.30	223.90	
EASLEY/SASFRS MT	KJ4X	222.46	224.06	
LEXINGTON	KA4FEC	222.52	224.12	P
PICKENS/CSRS HD	WB4QHF	222.54	224.14	PA

440 MHZ

CAESARS HEAD	WB4LZQ	448.875	443.875	N
COLUMBIA	KC4YI	449.10	444.10	
LEXINGTON	N4GUP	439.25	421.25	V
MT PLEASANT	N4DRU	449.70	444.70	
N. AUGUSTA	WB4OCB	449.15	444.15	D
PICKENS/CSRS HD	WA6WAY	447.00	442.00	PA
ROCK HILL	KA4RFA	449.75	444.75	N LPA
SUMMERVILLE	WA4HNK	443.80	448.80	N NB
SUMTER	N4IGN	449.95	444.95	N P

6 METERS

COPE	N4HSN	52.05	53.05	D
PICKENS	WB4YXY	52.41	53.41	

VIRGINIA REPEATERS

2 METERS

ACCOMAC	WA4TVS	147.855	147.255		A
ALEXANDRIA	N4FSC	144.71	145.31	M	PA
ALEXANDRIA	WD4PDP	146.055	146.655	M	PA
ALEXANDRIA	W4HFH	147.915	147.315	M	L
ALTAVISTA	WA4ISI	146.055	146.655		PA
ARLINGTON	N4EFJ	144.87	145.47	M	
ARLINGTON	WA4YVM	146.445	147.045	M	T
BARREN SPRINGS	K4HZS	146.07	146.67		
BEDFORD	WB4DBB	144.63	145.23		
BEDFORD	WB4JBJ	147.705	147.105	D	LR
BLACKSBURG	AB9I	146.115	146.715		
BLAND	N4AZJ	144.75	145.35	N	L
BLUEFIELD	W8MOP	144.89	145.49		
BRISTOL	K4ILW	146.07	146.67	N	A
BRISTOL	WDECYZ	146.28	146.88	N	
BROMLEY MT	WR4ATJ	146.01	146.61	N	
CHARLOTTESVILLE	WA4TFZ	146.16	146.76		
CHARLOTTESVILLE	WA4TFZ	146.325	146.925		
CHESAPEAKE	K4NDH	144.69	145.29	D	EA
CHESAPEAKE	N4GSP	146.01	146.61		A
CHESAPEAKE	N4SD	146.19	146.79	D	A
CHESTERFIELD	KA4CBB	147.96	147.36		
CHESTERFLD CO	WA4ECM	147.66	147.06		
CLIFTON FORGE	K4QEL	147.90	147.30	N	
COVINGTON	WA4HTI	146.205	146.805		
CULPEPPER	N4FAF	147.72	147.12	M	
DANVILLE	K4YZR	147.95	147.35	N	NB
DANVILLE(DCC)	WB4GJG	146.325	146.925	D	
DANVILLE/WHT OAK	K4WQS	146.10	146.70	D	
DUBLIN	KT4Z	147.78	147.18		
DUFFLD/POWLL MT	KA4BHH	146.10	146.70		
FAIRFAX	W4LBL	146.19	146.79	M	PA
FALLS CHURCH	W4AQD	144.75	145.35	M	T
FARMVILLE	WB4NWP	146.31	146.91	N	A
FINCASTLE	W4WIC	146.04	146.64		
FOREST	K4STE	146.16	146.76		A
FRANKLIN	K4SPS	147.90	147.30	N	PA
FREDRICKSBURG	WB4LNT	147.615	147.015		
GALAX	WA4ZIV	144.79	145.39	N	
GALAX/BRIRP MT	N4VL	147.69	147.09	D	
GALAX/FRIES	WA4DFH	147.735	147.135		A
GATE CITY	WD4GTA	147.945	147.345	N	
GRUNDY	K4HWQ	147.92	147.32	N	ANB
GUM SPRING	KB4GX	147.87	147.27		
HAMPTON	K4UMI	145.23	PKET	N	
HAMPTON	K4DHO	146.13	146.73		
HAMPTON	K4UMI	146.34	146.94	N	T
HAYSI	WB4WAU	147.60	147.00	D	
HAZEL MT	WD4CYZ	146.235	146.835	N	
HILLSVILLE	WD4BTJ	147.975	147.375	D	A
JONESVILLE	WA4OVC	146.31	146.91		
KILMARNOCK	W2MS	144.61	145.21	N	C
LEXINGTON	WA4WBD	146.07	146.67		
LEXNGTN/COLE MT	K4PQD	147.93	147.33	N	
LYNCHBURG	W4WWQ	146.01	146.61	D	
LYNCHBURG	AB4M	147.43	144.93		NB
LYNCHBURG	WA4RTS	147.795	147.195		
LYNCHBURG	W4OSH	147.975	147.375	N	PA
MADISON	N4AJO	147.99	147.39	M	
MANASSAS	WD4JCE	144.67	145.27	M	R
MANASSAS	WA4FPM	146.37	146.97		PA
MARION	N4BIW	146.04	146.64		
MARTINSVILLE	AB4L	147.885	147.285		
MCLEAN	WD4IWG	147.81	147.21	M	R
MT. LK/BALD KNB	K4TUE	146.31	146.91	D	
NEW MARKET	WB4DAK	146.025	146.625		
NEWPORT NEWS	WB4CTF	147.765	147.165		PA
NEWPORT NEWS	WA4OHX	147.975	147.375	D	PA
NORFOLK	NE4D	146.10	146.70		
PETERSBURG	N4KAF	147.78	147.18		
PETERSBURG	K4ARO	147.84	147.24		TPA
PETERSBURG	K4ARO	147.99	147.39		
POINT LKOUT MT	N4VL	144.53	145.13		EA
PORTSMOUTH	N4PR	146.25	146.85		
RADFORD	KC4WA	147.645	147.045		
RICHMOND	K4YPE	144.51	145.11		A
RICHMOND	W4SQT	144.83	145.43		
RICHMOND	WB4QEY	146.04	146.64		PA
RICHMOND	WA4ZBE	146.28	146.88		PA
RICHMOND	W4ZA	146.34	146.94		
RICHMOND	WA4JST	146.43	147.03	N	
RICHMOND	N4HB	147.735	147.135		
ROANOKE	WB4QET	146.34	146.94	D	A
ROANOKE/POOR MT	WB4QOJ	146.145	146.745		LPA
ROANOKE/POOR MT	W4CA	146.385	146.985	D	
SALEM	W4PDL	146.28	146.88	N	
SOUTH BOSTON	WD4LBM	146.46	147.06		
STAUNTON	W4XD	146.10	146.70		
STAUNTON	WA4ZBP	146.25	146.85		
STAUNTON	W4WRN	146.37	146.97	D	EA
STAUNTON/EL. KB	W4WRN	147.645	147.045	D	
STERLING	WA4TXE	146.115	146.715	M	
SUFFOLK	WA4HMT	146.40	147.00	N	PA
TAZEWELL	WD4DZE	147.75	147.15	N	
TYSONS CORNER	WB4FMD	146.31	146.91	M	PA
VIENNA	K4HTA	146.085	146.685	M	
VIRGINIA BEACH	WA4KXV	146.37	146.97		PA
VIRGINIA BEACH	WA4SBC	147.645	147.045	N	
WARRENTON	WB4FJT	147.765	147.165	M	
WARSAW	KA4ZIP	147.93	147.33		
WAYNESBORO	W4BLD	147.63	147.03		
WAYNSBR/AFTON MT	W4PNT	147.675	147.075	D	
WILLIAMSBURG	W4NTG	146.07	146.67	D	
WINCH/BLUEMONT	WA4TSC	147.90	147.30		
WINCHESTER	W4RKC	146.22	146.82		
WISE/HIGH KNOB	K4AXO	147.81	147.21	D	
WOODBRIDGE	WB4FQR	147.84	147.24	M	A
WYTHEVILLE	WA4EMS	146.175	146.775		
YORKTOWN	WD4SDC	147.825	147.225	N	

CVRA REPEATER SYMBOLS

Unmarked in First Code column-Full CVRA Members

N	NON Member CVRA	RB	Remote Base System
NB	Not On Band Plan Freq.	T	Tone Access Repeater
M	T-MARC Repeater	L	Linked Repeater
A	Open Autopatch	R	Radioteletype Rptr.
FA	Private Autopatch	V	Television (SS or ATV)
EA	Emerg. Autopatch	P	Proposed Repeater
		C	Under Construction
		O	Off Air Temporarily

220 MHZ

ALEXANDRIA	WA4CCF	223.22	224.82	M	L
DAN/WHT OAK	K4OAK	223.16	224.76	N	
FAIRFAX	WB4YHD	222.50	224.10	M	L
FALLS CHURCH	N4CHP	223.38	224.98	M	PA
GALAX/MT LKOUT	WA4DFH	222.74	224.34		
PETERSBURG	K4ARO	222.40	224.00		
ROANOKE/POOR MTN	WB4DBB	223.34	224.94		
STERLING PK	WD4KHP	222.12	223.72		C
TYSONS CORNER	WD4KHP	223.12	224.72		PL

440 MHZ

ALBERTA	K4ARO	449.55	444.55	D	L
ALEXANDRIA	WR4AAG	439.25	426.27	M	V
ALEXANDRIA	W4HFH	449.60	444.60	M	
APPLE ORCH MT	WB4DBB	449.35	444.35		L
CHARLOTTESVILLE	WA4TFZ	449.25	444.25		
CHESAPEAKE	N4EVG	448.90	444.90	N	C
COVINGTON	WA4HTI	447.25	442.25		
FALLS CHURCH	WB8CRK	449.45	444.45	M	L
FINCASTLE	W4WIC	448.75	443.75		
HAMPTON	K4UMI	448.65	443.65	N	
LEXNGTN/COLE MT	K4PQD	449.15	444.15	N	
LYNCHBURG	K4HEX	449.50	444.50		
MANASSAS	WD4JCE	444.225	449.225	M	L
MANASSAS	WB3EAQ	448.30	443.80	M	
NORFOLK	W4WIN	439.25	426.25	D	V
NORTHWEST/SE VA	KR4K	448.80	443.80	N	
PETERSBURG	K4ARO	449.85	444.85		

VIRGINIA REPEATERS *Continued*

RICHMOND	N4HB	449.00	444.00		
RICHMOND	K4ARO	449.65	444.65		
ROANOKE	N4HON	447.70	442.70		
ROANOKE	WR4AFE	447.75	442.75	N	
ROANOKE/POOR MT	W4CA	447.50	442.50	D	
SALUDA	WA4UAF	448.90	443.90	N	
SPRINGFIELD	AA4VA	449.15	444.15	M	
STAUNTON	WA4ZBP	449.825	444.825		C
STAUNTON	W4WRN	449.95	444.95	N	
TYSONS CORNER	WB6GUS	448.50	443.50	M	
TYSONS CORNER	K4JYF	449.75	444.75	M	
VIRGINIA BEACH	WA4KXV	449.95	444.95		
WAYNESBORO	W4BLD	449.30	444.30		TPA
WAYNSBR/AFTON MT	W4BLD	449.05	444.05		
WILLIAMSBURG	W4NTG	448.95	443.95	M	
WINCH/BLUEMONT	WA4TSC	444.925	449.925		
WINCHESTER	W3CSG	447.00	442.00	M	
WOODBRIDGE	WB4FQR	444.90	449.90	M	

6 METERS

ABINGTON	WR4ATJ	52.01	53.01	M	L
ALEXANDRIA	WA4CCF	52.13	53.13	M	L
BEDFORD/THAX MT	WB4DBB	52.15	53.15		
CHARLOTTESVILLE	WA4TFZ	52.525	52.525		RB
DANVILLE(DCC)	WB4GJG	52.13	53.13	D	
FAIRFAX STA	WD4KHP	52.64	52.84		NB
FAIRFAX	KA4DCS	52.58	52.48	M	NB
LEXNGTN/COLE MT	K4PQD	52.01	53.01	N	L
NORTN/HIGH KB	K4LSP	52.01	53.01	N	
RICHMOND	KA4NNN	52.43	53.43		N
RIDGEWAY	KE4FJ	52.25	53.25	D	
ROANOKE	WB4DBB	52.25	53.25		L

10 METERS

STERLING	KD4DN	29.58	29.68	M	P

TENNESSEE REPEATERS

2 METERS

ALAMO	WB4EDS	147.135	147.735	N	B
ALTAMONT	WR4AWN	146.37	146.97	N	
ATHENS	WB4GRC	144.71	145.31	N	
BENTON	K4SIR	144.85	145.45	N	
BESSEMER(ALA)	N4AHN	144.55	145.15	D	NBL
BIRMINGHAM(ALA)	WD4BXA	147.285	147.885		ANB
BLOUNTVILLE	WA4KMG	147.60	147.00	N	
BRISTOL	K4ILW	146.07	146.67		A
BRISTOL	WD4CYZ	146.28	146.88	N	
BRISTOL/HLSTN MT	WR4ADO	146.16	146.76	N	
BROWNSVILLE	WA4ABU	146.655	146.055	N	NB
CHATT/SIGNAL MT	WA4ZOK	147.60	147.00		PA
CHATTANOOGA	K4VCM	144.69	145.29		
CHATTANOOGA	W4AM	144.73	145.33		
CHATTANOOGA	KB4TZ	144.79	145.39		A
CHATTANOOGA	K4CMY	146.01	146.61		
CHATTANOOGA	W4DSK	146.19	146.79		A
CHATTANOOGA-RTTY	K4CMY	144.53	145.13	N	
CLARKSVILLE	WA4TEQ	147.60	147.00	N	
CLEVELAND	WD4DES	147.78	147.18		
COOKEVILLE	WA4UCE	146.07	146.67	N	A
COOKEVILLE	N4WS	147.81	147.21		PA
COVINGTON	WA4VXW	147.93	147.33	N	
CROSSVILLE	KE4RX	146.04	146.64	N	
CROSSVILLE	W4CV	147.93	147.33	N	
DAYTON/RHEA CTY	K4ZLA	147.99	147.39	N	
DECATUR-PONE KB	W4RJC	144.55	145.15		
DYERSBURG	AA4HF	146.145	146.745	N	
FAYETTEVILLE	KO4G	146.265	146.865	N	
FAYETTEVILLE	W4NIQ	147.63	147.03	N	
FISHERVILLE	N4DRL	144.65	145.25		A
FRANKLIN	WB4HCK	144.55	145.15	N	RB
FRAYSER	W4UFT	146.10	146.70	N	
GALLATIN	W4NIT	147.84	147.24	N	PA
GALLATIN	WA4YQC	147.87	147.27	D	PA
GALLATIN	WB4DLQ	147.99	147.39	N	T
GREENEVILLE	N4TV	144.79	145.39		
GREENEVILLE	WB4TUO	144.81	145.41		
GREENEVILLE	WA4LYF	147.66	147.06		A
GTLBG/COVE MTN	WA4KJH	146.25	146.85	D	L
HENDERSONVILLE	WB4WZK	146.115	146.715	D	
HENDERSONVILLE	WD4FFM	147.945	147.345	N	
HERMITAGE	WB4DOR	144.79	145.39		
JACKSON	KF4SC	144.71	145.31	N	
JACKSON	W4WKZ	147.81	147.21	N	
JASPER	KD4XX	144.59	145.19	D	
JOHNSON CITY	WB4SQC	144.69	145.29	D	EA
JOHNSON CITY	WB4EHK	146.19	146.79		
JOHNSON CITY	KE4FH	147.87	147.27	D	A
KNGSPT/BAYS MT	W4TRC	146.37	146.97	D	A
KNOXVILLE	WB4JSD	144.51	145.11		R
KNOXVILLE	K4KFD	144.61	145.21	N	A
KNOXVILLE	WA4TEM	144.73	145.33		A
KNOXVILLE	WA4GZE	144.77	145.37		
KNOXVILLE	WB4GBI	144.83	145.43		
KNOXVILLE	K4HXD	146.34	146.94	D	
KNOXVILLE	K4HXD	147.675	147.075	D	A
KNOXVILLE	W4BBB	147.90	147.30		
KNXVL/CROSS MT	WB4HAP	147.96	147.36		
KNXVL/ENG MT	WB4IOB	146.13	146.73		
KNXVL/HOUSE MT	WB4GBI	144.87	145.47		
LAFOLLETTE	KA4OAK	144.53	145.13		A
LAFOLLETTE/WMT	W4TZG	146.07	146.67		
LAKE CITY	WB4OAH	146.22	146.82	N	
LEBANON	KE4VZ	146.13	146.73		PA
LEBANON	WB4DOR	147.645	147.045		
LENOIR CITY	KE4SK	144.57	145.17	D	
LEXINGTON	WB4LGH	146.43	147.03	N	
MANCHESTER	W4FOT	146.10	146.70	N	A
MARTIN	WA4ZQX	146.625	146.025	D	NB
MCMINNVILLE	WA4CPJ	144.63	145.23		A
MCMINVL/SHT MT	W4KKO	144.89	145.49		
MEDINA	K4BEZ	146.37	146.97	N	A
MEMPHIS	WA4VIP	144.81	145.41	N	
MEMPHIS	WA4KOG	144.89	145.49	N	
MEMPHIS	WB4MQD	145.33	PKET	N	
MEMPHIS	W4GYS	146.04	146.64	N	
MEMPHIS	WR4AOG	146.10	146.70	N	R
MEMPHIS	KA4JXT	146.13	146.73	N	
MEMPHIS	WR4ABS	146.19	147.51	N	NB
MEMPHIS	W4BS	146.22	146.82	N	
MEMPHIS	WA4KOG	146.25	146.85	N	A
MEMPHIS	WA4ETE	146.28	146.88	N	A
MEMPHIS	K4BN	146.34	146.94	N	A
MEMPHIS	K4FZJ	146.40	147.00	N	
MEMPHIS	WA4MQQ	146.46	147.06	N	
MEMPHIS	W4ZJM	147.63	147.03		L
MEMPHIS	WR4AWT	147.69	147.09	N	
MEMPHIS	WB4DAZ	147.72	147.12	N	AT
MEMPHIS	WA5KUB	147.75	147.15	N	
MEMPHIS	WA4KOG	147.78	147.18	N	
MEMPHIS	WD4APK	147.84	147.24	N	
MEMPHIS	WR4AZC	147.87	147.27	N	
MEMPHIS	WA4ADT	147.90	147.30	N	
MEMPHIS	WB4MMI	147.96	147.36	N	
MEMPHIS	WR4ASR	147.99	147.39	N	
MIDDLEBRO(KY/TN)	W4PPM	144.63	145.23	N	
MILLINGTON/NB	W4ODR	146.43	147.03		L
MORRISTOWN	WD4RTT	147.63	147.03	D	EA
MORRISTOWN	WB4OAH	147.825	147.225	N	
MOUNTAIN CITY	WD4OMO	144.87	145.47	N	
MUFREESBORO	N4FJI	144.61	145.21	N	
MURFREESBORO	WB4LHO	144.57	145.17	D	PA
NASHVILLE S.	WB4NTM	147.96	147.36		R
NASHVILLE S.W.	WB4NTM	146.07	146.67		EA
NASHVILLE	N4AJS	144.65	145.25	D	
NASHVILLE	KA4KNG	144.75	145.35	N	
NASHVILLE	N4ARK	144.87	145.47	N	
NASHVILLE	WA4PCD	146.01	146.61	D	PA
NASHVILLE	WB4NTM	146.04	146.64		EA
NASHVILLE	WB4QES	146.16	146.76	N	
NASHVILLE	W4SQE	146.19	146.79		
NASHVILLE	N4TK	146.25	146.85	D	PA

TENNESSEE REPEATERS

NASHVILLE	WB4QES	146.28	146.88	N
NASHVILLE	WA4PCD	146.34	146.94	D
NASHVILLE	AF4K	147.615	147.015	N
NASHVILLE	WD4FFM	147.705	147.105	N
NASHVILLE	WA4PCD	147.75	147.15	D
NASHVILLE	WA4PCD	147.78	147.18	D
NASHVILLE	WB4ZSA	147.90	147.30	D PA
NASHVILLE	N4AJS	147.93	147.33	D
OAK RIDGE	W4SKH	146.28	146.88	N
OAK RIDGE	W4SKH	146.37	146.97	N A
OAK RIDGE	K4EAJ	147.72	147.12	L
OAK RIDGE	K4EAJ	147.75	147.15	R
PARIS	K4KLX	147.96	147.36	A
PIKEVILLE	K4MJM	147.885	147.285	
PULASKI	KA4CCL	146.175	146.775	N
SAVANNAH	WB4DQU	146.31	146.91	N
SEVIERVILLE	N4CJX	144.67	145.27	D EAC
SHELBYVILLE	W4QEB	147.66	147.06	A
SHORT MTN	W4YXA	146.31	146.91	EA
SPARTA/BON AIR	W4BSA	147.69	147.09	D A
SPRINGHILL	NW4E	144.85	145.45	PA
STANTONVILLE	KA4OHC	144.79	145.39	N
UNION CITY	WA4YGM	146.10	146.70	
WAVERLY	NO4Q	146.685	146.085	N NB
WINCHESTER	WR4AFH	146.22	146.82	N

220 MHZ

CHATT/SIGNAL MT	WA4ZOK	223.30	224.90	
CHATTANOOGA	K4VCM	223.18	224.78	A
CLARKSVILLE	KF4GP	222.34	223.94	N
FRANKLIN	WD4SGS	222.54	224.14	N
GALLATIN	WB4ZSA	222.38	223.98	D PA
GREENEVILLE	WB4NKM	223.34	224.94	A
HERMITAGE	WB4RAB	222.30	223.90	
KNOXVILLE	WA4YON	222.86	224.46	
KNOXVILLE	W4BBB	222.90	224.50	
KNOXVILLE	KB4CTS	223.22	224.82	N C
MEMPHS/FRAYSER	W4ZJM	222.34	223.94	LO
NASHVILLE	N4TB	222.42	224.02	N
NASHVILLE	WB4UEX	222.48	224.08	N
NASHVILLE	N4AWB	222.62	224.22	N

440 MHZ

ALAMO	WB4EDS	448.75	443.75	N L
CHATT/SIGNAL MT	WA4ZOK	439.25	427.25	V
CHATTANOOGA	WA4NFO	449.10	444.10	D
FISHERVILLE	N4DRL	432.01	BEACON	
FISHERVILLE	N4DDS	449.30	444.30	A
FRANKLIN	WB4EPG	447.80	442.80	N
GALLATIN	WD4BKY	449.35	444.35	D
GALLATIN	WD4KWP	449.45	444.45	
GATLBG/COVE MT	WA4KJH	448.30	443.30	D L
GREENEVILLE	WB4NKM	449.65	444.65	
HOOVER(ALA)	K4FUM	449.30	444.30	
KNOXVILLE	WB4HAP	447.50	442.50	D
KNOXVILLE	K4HXD	449.30	444.30	D
KNOXVILLE	KB4NK	449.60	444.60	
KNOXVILLE	WB4GBI	449.70	444.70	
MEDINA	K4BEZ	447.05	442.05	N AL
MEMPHIS	WA4KOG	444.40	449.40	N NB
MEMPHIS	WA4QWW	447.80	442.80	N
MEMPHIS	W4ZJM	448.00	443.00	
MEMPHIS	WA4DOA	448.40	443.40	N A
MEMPHIS	KA4JKT	449.50	444.50	N A
MEMPHIS	WD4APK	449.80	444.80	N
MILAN	WD4ABJ	447.10	442.10	
MORRISTOWN	KA4NEX	449.20	444.20	N
NASHVILLE	WA4PCD	449.55	444.55	D
NASHVILLE	WA4PCD	449.675	444.675	D
NASHVILLE	N4TK	449.775	444.775	N
NASHVILLE	WB4THG	449.875	444.875	N
NASHVILLE	WB4QES	449.975	444.975	N
OAK RIDGE	K4EAJ	449.40	444.40	L
PARIS/GROVE HL	WA4WKS	448.50	443.50	

6 METERS

CHATTANOOGA	WB4LRD	52.01	53.01	D
KNOXVILLE	WA4YON	52.25	53.25	
KNOXVILLE	WB4GBI	52.35	53.35	C
KNOXVILLE	K4HXD	52.76	52.525	D NB
KNXVL/ENG MT	WB4IOB	52.15	53.15	
MEMPHIS	WA4KOG	52.01	53.01	N

10-METERS

MEMPHIS/FRAYSER	W4ZJM	29.52	29.62	

WEST VIRGINIA REPEATERS

2 METERS

ALDERSON	WA8AVZ	146.13	146.73	N
BECKLEY	KC8FW	144.77	145.37	N LA
BKLY/FLAT TOP MT	K8BO	146.25	146.85	D A
BLUEFIELD	W8MOP	144.89	145.49	
BOLT MT	KD8X	144.57	145.17	N L
BRIDGEPORT	K8VNQ	147.72	147.12	EAL
BUCKHANNON	K8WYH	146.25	146.85	N
CHARLESTON	W8WHQ	144.83	145.43	D
CHARLESTON	WB8IFS	146.22	146.82	N
CHARLESTON	WB8CQV	146.28	146.88	N
CLARKSBURG	WB8ZVS	146.22	146.82	D
CLARKSBURG	WB8DTM	146.50	52.525	N NB
DUNBAR	K8VKI	147.72	147.12	
EAST RIVER MNT	WD8OGY	146.355	147.955	A
FAIRMONT	W8SP	146.31	146.91	D
FRANKLIN	W3RUA	147.945	147.345	
GRAFTON	K8VNQ	147.975	147.375	L
HARRISVILLE	WB8NSL	147.90	147.30	N
HERNDON	WA8VOZ	146.025	146.625	
HUNTINGTON	WB8FEQ	144.61	145.21	
HUNTINGTON	WB8EZR	146.04	146.64	
HUNTINGTON	W8VA	146.16	146.76	A
HUNTINGTON	KA8BKX	147.90	147.30	PA
KINGSTON/LICK KB	W8FG	144.87	145.47	
LAYLAND/MANN MT	N8BZS	144.71	145.31	N L
LEON	WB8NMT	147.78	147.18	N
LIBERTY	K8SLI	144.81	145.41	N P
LOGAN	WD8KWC	144.63	145.23	N
LOGAN	WA8ZLR	146.09	147.11	N ONB
LOGAN	WD8DRV	146.37	146.97	D
MADISON	KA8JYR	146.06	147.06	N NB
MARMET/BEE MT	N8DBN	144.55	145.15	N
MARTINSBURG	WA8FSE	144.55	145.15	M
MARTINSBURG	WB8VAZ	147.855	147.255	M
MCMECHEN	WA8ULB	146.31	146.91	PA
MCMECHEN	N8CFX	147.75	147.15	PA
MONTGOMERY	WB8VUY	147.99	147.39	N
MORGANTOWN	K8LG	144.83	145.43	N L
MORGANTOWN	W8CUL	146.16	146.76	LPA
MULLENS	KC8IT	147.63	147.03	LA
NEW MARTINSVLLE	WB8CSW	146.34	146.94	N
OAK HILL	W8GH	146.19	146.79	EA
PARKERSBURG	WA8CRW	146.37	146.97	PA
PARKERSBURG	W8JZN	147.99	147.39	
PARSONS	K8VNQ	144.73	145.33	EAL
PCTN/EAST RIVER	WD8OGY	146.355	146.955	
POINT PLEASANT	W8KNM	147.66	147.06	N
PRINCETON	KA8PNC	146.46	147.06	A
RAVENSWOOD	WD8JNU	146.07	146.67	
RAVENSWOOD	WD8JNU	146.10	146.70	R
RICHWOOD	K8VKB	146.34	146.94	
RIPLEY	K8SNW	146.31	146.91	N P
SALT ROCK	WD8MCR	144.51	145.11	N
SCOTT DEPOT	K8SLI	147.87	147.27	N A
SPENCER	KA8AUW	146.01	146.61	N
ST ALBANS	WB8GDY	146.40	147.00	
ST ALBANS	K8BCH	147.975	147.375	R
ST ALBANS/COAL	WB8KAD	146.12	146.72	D PA
ST ALBANS/COAL	WB8OEC	147.75	147.15	N
ST MARYS/BENS R	WB8ECC	147.63	147.03	N L
TERRA ALTA	WB8PHU	147.60	147.00	PA

WEST VIRGINIA REPEATERS *Continued*

WEIRTON	KC8JN	146.34	146.94	D A
WELCH	WB8SXZ	144.85	145.45	N
WESTON	WD8EOM	144.79	145.39	N
WHEELING	W8YFX	144.59	145.19	D
WHEELING	W8JDH	146.16	146.76	N

220 MHZ

HUNTINGTON	KA8BKX	222.54	224.14	N
KINGSTON/LICK KB	W8FG	223.14	224.74	

440 MHZ

BECKLEY/EOC	N8FRV	449.80	444.80	N
MORGANTOWN	K8LG	449.70	444.70	N L
MORGANTOWN	W8CUL	449.80	444.80	PA

6 METERS

ST MARYS/BENS R	WD8RET	52.17	53.17	N L

EAST KENTUCKY REPEATERS

2-METERS

DAMRON MTN	K4BGQ	147.87	147.27	D
GUTHRIE	KA4NNE	146.025	146.805	N
LOUISA	WA4SWF	146.13	146.73	D
LYNCH/BLACK MT	N4IZD	147.945	147.345	D
MOREHEAD	K4GFY	146.31	146.91	
PIKEVILLE	N4ETG	146.19	146.79	
PIKEVILLE	N4IXA	146.25	146.85	EA
PIKEVILLE	WB4GEL	147.87	147.27	PA
PRESTONSBURG	K4ICN	144.69	145.29	

440 MHZ

LYNCH/BLACK MT	N4IZD	448.10	443.10	D

GEORGIA REPEATERS

2 METERS

ALBANY	WB4TFW	147.75	147.15	
ATHENS	WA4BKF	147.225	147.825	
ATHENS	K4TQU	147.375	147.975	NB
ATLANTA/BELL	W4PME	144.81	145.41	
ATLANTA/GA TECH	W4AQL	144.55	145.15	PA
AUGUSTA	N4JA	144.77	145.37	
AUGUSTA	W4LWT	146.04	146.64	
AUGUSTA	NA4I	146.385	146.985	PA
AUGUSTA	W4ALK	147.72	147.12	PA
AUGUSTA	N4BMA	147.78	147.18	D R
AUGUSTA/MARTINEZ	WB4YHT	144.89	145.49	
BLAIRSVILLE	N4EFL	147.705	147.105	
DALTON	K4WNG	144.63	145.23	
DALTON	N4BZJ	144.65	145.25	
DALTON	KC4TT	147.315	147.915	NB
DALTON	N4BZJ	147.735	147.135	
DALTON	KE4LN	147.81	147.21	
DECATUR	W4VTA	144.51	145.11	D EA
DECATUR	WB4CPL	144.75	145.35	
DECATUR	N4AQV	146.205	146.805	D
GAINESVILLE	W4NSO	146.07	146.67	A
GRIFFIN	WB4GWA	144.79	145.39	PA
HARTWELL	KY4T	146.895	146.295	NBEA
LANIER MT/SNLV	WD4JXR	147.675	147.075	PA
NEWNAN	K4SEX	144.53	145.13	PA
NEWNAN	K4SEX	146.19	146.79	
ROSSVILLE	KC4EV	144.75	145.35	
SAVANNAH	W4HBB	146.28	146.88	
SAVANNAH	W4HBB	146.37	146.97	A
TOCCOA	KA4DIP	147.93	147.33	
WRENS	N4JA	144.77	145.37	D P

220 MHZ

DALTON	N4BZJ	223.28	224.88
ROSSVILLE	KC4EV	223.34	224.94

440 MHZ

ATLANTA/BELL	K4LDR	449.15	444.15
DALTON	WA4TIW	449.735	444.735

10 METERS

ATLANTA	KE4IO	29.52	29.62	D

NOTE: Only Full Member Repeaters in Georgia are listed

-HONOR ROLL-

WEST VIRGINIA

Grafton, K8VNQ
Huntington, WB8EZR
Princeton, KA8PNC
East River Mt, WD80GY
Ravenswood, WD8JNU (2)
Morgantown, W8CUL
Bridgeport, K4VNQ
Franklin, W3RUA
Oak Hill, W8GH
Terra Alta, WB8PHU
Parsons, K8VNQ
Bridgeport, K8VNQ
Grafton, K8VNQ
Pctn/East River, WD80GY
Parkersburg, WA8CRW
Parkersburg, W8JZN
Huntington, W8VA
Huntington, WB8FEQ
McMechen, WA8ULB
McMechen, KD8GL
Dunbar, K8VKI
Huntington, KA8BKX

GEORGIA

Augusta, W4LWT
Hartwell, KY4T
Savannah, W4HBB (2)
Augusta, W4ALK
Dalton, KE4LN
Dalton, N4BZJ (3)
Dalton, WA4TIW
Augusta/Martinez, WB4YHT
Augusta, N4JA
Dalton, KC4TT
Newnan, K4SEX (2)
Atlanta/Ga. Tech, W4AQL
Athens, K4TQU
Augusta, NA41
Lanier Mt/Snlvle, WD4JXR
Atlanta Bell, W4PME
Atlanta Bell, K4LDR
Blairsville, N4EFL
Albany, WB4TFW
Decatur, WB4CPL
Gainesville, W4NSO
Dalton, K4zwng
S. Miss Rge/Rosvl, KC4EV (2)
Blairsville, N4EFL

EAST KENTUCKY

Prestonsburg, K4ICN
Morehead, K4GFY

Pikeville, N4IXA
Pikeville, N4ETG
Pikeville, WB4GEL

Bluefield Club Repeater Battles Mountain Elements

—by Don Williams WA4K

The East River Amateur Radio Club of Bluefield, WV/VA has ordered a brand new repeater for the "BR549" East River Mountain location near Bluefield, according to Don "Andy" Anderson, WD800R, repeater chairman for the club.

The group expects the new repeater to be in operation sometime this month. It was ordered from Micro Control Specialties division of Kendecom, Inc., in Groveland, Massachussets, on December 21st.

The old 145.49 machine, a VHF Engineering kit/homebrew repeater, had been in operation on the mountain since 1978, first on 146.76, and then, upon the release of the subband frequencies, the present "BR549" frequency. The VHF Engineering equipment replaced a tube-type machine which was given to the club and installed in August, 1977.

Recent troubles with lightning (more than five strikes during 1984) began with an electrical storm in January, 1984. Frustrations with resultant problems and the inability to obtain parts due to the demise of VHF Engineering rendered the repeater virtually unusable. Fortunately, the club is a holder of the ARRL insurance policy, which covers everything except the antenna and feedline.

Continued on Page 47

SUPER SANTEC WEEKEND

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H.O.T.P
(Hot Off The Press) Associate Memberships

—by David Ward, KA4LVO

Want to be the first in your neighborhood to get the Repeater Journal? Move frequently and forget to let us know, then remember six months later after missing 2 valuable issues of the Repeater Journal?

Though the post office is supposed to deliver all mail it receives, third-class receives lesser attention and occasionally never gets delivered. One solution suggested was to use first-class mail.

H.O.T.P. Associate Membership Journals will be mailed as first-class mail, which means that the post office will forward the Journal when you notify them of your new address. In the event you cannot be found, your Journal is returned to us. In addition, these Journals will be mailed the same day we get them from the printer, Hot Off The Press. That's at least two days before the regular third-class bulk mailing.

H.O.T.P. Associate Membership, just write the Associate Membership Chairman for details. His address is found on page 2.

K7UGA Sez "Hands Off 220 Mhz" To FCC

—From the ARRL Letter

In a November letter to Mark Fowler, Chariman of the FCC, Senator Barry Goldwater, K7UGA, asked the Commission to "keep hands off 220". Goldwater says, "More and more, I am getting word that the Commission might be considering a rulemaking aimed at reducing the 220 Mhz allocation used by amateurs on a shared basis with the government. Now, this isn't going to set well and I think the Commission would be wrong in doing this.

"There is an increasing demand for more services to the public which use the raiowaves, and most importantly, some new technologies being developed through experimentation permit more signals to coexist within the present bands. I think we especially need to encourage these. But, let's not knock down amateur radio once again in our efforts. The 220 Mhz band is where we amateurs can do a lot of experimentation with these new technologies that will benefit all spectrum users. Removing these frequencies from amateur use is unnecessary and would be shortsighted.

"So, I ask you to keep hands off 220. It's needed for continued amateur experimentation, like the hams always have done."

Round Table Radio Glossary

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Survival of a Dream Tinged With Nightmares

Things Are Really Beginning To Look Up!

—by Wayne C. Williams, K4MOB

I really hadn't planned to follow up last issue's story with much this time, but the response to the story was overwhelming, to say the least. I got over 500 comments at hamfests, clubs, visits and letters, with people identifying with me and my woes with bureaucratic red tape. The story has even encouraged a Real Estate Appraiser out of New Jersey to write about zoning pitfalls of antennas and towers when looking for that new dream home. (His stories appear elsewhere in this issue of the Journal)

So with your prodding, dear readers, and my mind reeling and head swollen too large to fit my "catapiller" cap, we will continue with the saga of building the "dream HamShack", although I warn you in the beginning, I won . . . I think!

First . . . to recap

For 15 years I had wanted to expand my hamshack at my present Colfax location. I wanted lots of room for my ham bench, a place for the computers, copy machine, and tables to work on little projects. I wanted easy access to the mass of cables normally required to connect up a bench of various radios, receivers, recorders, base chargers, etc.

The job began last Spring and we got under the roof and moved in sometime in late October.

After the Virginia Beach Hamfest

As you recall, I had hired an electrician to come in and hook up some wiring for me to make the electrical inspector happy. Well we returned from the hamfest on the September 21-22 weekend and waited most of the week. On Thursday, the electrician came and went to work. He tied all my wires together, rough wired the two 20-amp disconnects and get everthing presentable for inspection. I called the Inspections office and told them I was ready for the Electrical inspection. Friday afternoon the gentleman came out and began looking around. After about 5 minutes he looked up at me following him around meekly and introduced himself. . . finally!

"What's all these boxes you got up in the ceiling" he growled!

I explained that I certainly felt he would have preferred I use junction boxes to tie wire ends coming across the room together.

"Well, We don't like those things, they ought to be outlawed," he again growled.

Then he walked over to some of the receptacles on the North wall. He fussed because I had put up the insulation and only the receptacle and short wires were showing. I told him that they were wired properly and stapled properly every 3 feet.

"Well, I can't tell that, you've got them covered up. How do I know you got this stuff done right," he grumbled.

I assured him that there was indeed wire running from each receptacle back to the switch panel, and he finally seemed half satisfied, especially when I walked over to a wall and violently ripped down a large piece of insulation, tearing the paper to shreds. I guess he felt maybe I had done it right, since I was showing a willingness to tear out the whole dang thing for his benefit if he insisted.

He walked into my "utility storage" (this was the term the electrician said to use, because breakers are not supposed to be housed in closets)

"What are these two things on the wall here, Mr. Williams."

I assured him they were 20-amp disconnects, running from the main electrical panel under the house.

"You don't need those things, why didn't you just run a wire from the panel and eliminate these things. And you ran #10 wire under the house and #12 wire out of the panels. What did you do that for , now the disconnects have got to stay to match up the wiring," he fumed.

"I thought you would require disconnects when running a couple of lines so far away, I explained, and I put #10 wire under the house in case I want to expand the service out here some day in the future."

He further checked to see that one disconnect contained only wiring for lighting, and the other for only receptacles.

Finally, after about an hour, he signed my "rough" electrical inspection permit, bade me farewell and left, to my great relief.

Things are looking up. . .

It was too late Friday to call for the framing inspection to get the man out before the weekend, so I waited until Monday and called. I stayed out of work so I could be there when he arrived.

He finally drove up at about 11:30 a.m. I anxiously stood in the doorway for what seemed like an hour while he wrote something down on what I would assume were his reports. Finally, he got out and came to the door.

What a pleasant surprise, he was a very polite and talkative gentleman (not at all like the gruff old electrical inspector).

He walked around, looked here, peered there, ripped back a couple of sheets of insulation, walked, and inspected.

"That framing brace over the window over there is not right," he said, "See the door brace, you should have done it that way."

I told him that the THREE two-by-fours were nailed each with 9 sixteen penny nails.

"Well, I'm not gonna make you tear that out, since you're a homeowner, doing your own building. If you were a contractor I'd make you tear it out and redo it," he said.

He then pulled out a steel rule and checked my ceiling height. "Seven foot four and one half inches . . . You're an inch and a half short Mr. WIlliams. What we gonna do about this? the minimum is seven and a half feet for ceilings."

Panicsville. . .!!!

"I don't know," I said.

After what seemed eternity, he smiled and said, "Mr. Williams, I'm gonna put this in my report, but I think we'll let you by on this, since it's residential and not commercial."

Whew! My heart restarted and I wobbled toward the back door to follow him outside. He walked completely around the three sides of the construction looking at the foundation, vents, insulation board, roof, sidewalls, terrain, then he stopped.

"Mr. Williams, where's your crawl space door, I want to see under the room."

Again. . . Panicsville. . .!!!

I don't have one," I managed saying, leaning against the building to keep from falling on my face.

Continued on Page 36

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Scholarships To Be Awarded By Foundation For Amateur Radio, Inc.

—Special to the Journal

The FOUNDATION FOR AMATEUR RADIO, INC., a non profit organization with Headquarters in Washington, D.C. plans to award (19) nineteen scholarships for the academic year 1985-86. The Foundation composed of fifty local area amateur radio clubs, fully funds two of these scholarships from proceeds of its annual Hamfest. It administers without cost to the donors (7) seven scholarships for the Quarter Century Wireless Association, two (2) for the Date (FL) Radio Club and one (1) each for the Radio Club of America, Edmund B. Redington Memorial, the Amateur Radio News Service, the Columbia (MD) Amateur Radio Association, the Baltimore (MD) Amateur Radio Club and the Lewis W. Wilkinson Memorial.

Licensed Radio Amateurs may compete for one or more of these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled or have been accepted for enrollment in an accredited university college or technical school. Most of the scholarships require the applicant to hold at least an FCC General Class license or equivalent. The scholarship awards range from $359 to $900 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs.

Additonal information and an application form can be requested by a letter or QSL/postcard, postmarked prior to May 31, 1985 from:

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Roanoke Division LPM Scheduled May 11-12

The 1985 ARRL Roanoke Division League Planning meeting will be held May 11-12 at the Ramada Inn South, Apex, N. C. (just South of Raleigh). The meeting is sponsored by the Raleigh and Cary Radio Clubs. Talk-in will be on 04-64 and 75-15.

What Does The Future Hold for Amateur Radio

Amateurs attending the LPM will have an opportunity to learn about and contribute to this question. Among ARRL personnel present will be Gay Milius, W4UG, Director; and John Kanode, N4MM, Vice-Director for the Roanoke Division. Others present will be representatives from Headquarters, the four Section Managers, and Section Emergency Coordinators of the Roanoke Division. Some Field Appointees will also be present.

The purpose of a LPM is to enable league members and other amateurs attending a chance to learn, and voice their opinion as to future plans of Amateur radio. The Director will take this information by to the league for possible implementation.

The meeting will start at 1 p.m. Saturday. At 7:30 p.m. there will be an informal dinner. Meetings will resume at 9 a.m. Sunday and finish at 12 noon.

All clubs are urged to send a representative and any other amateurs wishing to attend are encouraged to do so. For information about LPM '85, write to Sherman Starnes, W4TZU, Rt. 1, Box 99, Franklinton, N. C. 27525.

Motel rooms will be $34 per 2 "double bed" room. The registration is $14 for the meeting, $11.00 for the dinner. Fees will be slightly higher at the door. Pre-registration is encouraged.

Swimming Thru The Sea of Applications

Continued from Page 1

three different call signs and three different locations, and they are all within 30 miles of each other.

Several instances where friends pick up other friends' repeaters and list them on their applications are very honorable, but when that friend joins his own repeater, and lists the location different, that makes for mass confusion on these volunteer keepers of the indexes, two different applications, two different membership numbers, two different locations, and two different representatives. . .

Several applications were filled out, xeroxed and the bad copies sent to us. Do you know what kind of copies you get when you try to xerox a bad copy. . . bad copies.

It's not all bad though. We get some nice comments. We get dozens who DO take the time to fill out their information properly and make them easily readable. We share the excitement of seeing applciations coming in by the stack, and counting to see which State is getting the most. We have become one of the best abbreviating artists in the world. Our computer will accept only 14 characters (which is stated on the application) and we are getting good abbreviating something like: Hendersontownsendvilleboro/Goosewallowoverthehill Mountain.

Occasionally we get a good message like, "I would like to help in your wonderful organization. . . just let me know how?" I can assure you his Director will be calling on him real soon. Good help is hard to find. . . I guess that's why everyone keeps putting up with this editor!

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Ham Memories of F-D-R Contact

When I worked for the late Bill Stone, W8JZU, at his commercial stations I often heard him relate stories of his early years in radio, including an amateur radio story from the late 1930's that featured a U.S. President as a participant. At the time Stone was involved with a National Youth Administration (NYA) program and President Franklin D. Roosevelt made an inspection tour of the area which included a visit to the facility where Bill was a teacher.

During his stop at the NYA facility, F-D-R talked over the amateur radio station there. Bill is now deceased, but I recently with the ham who was on the other end of the Presidential contact. With notes from that ham, I can write the story.

The NYA was one of those "alphabet agencies" set up by the Roosevelt administration in an attempt to assist in the economic recovery during the depression which followed the 1929 Wall Street crash.

The NYA program in West Virginia included a facility in the Charleston area to provide training in trouble-shooting and repair of radio equipment. That was back when mobile and private radio systems were just getting started. Stone was director of the electronics division of the NYA at its training site at the Naval Ordinance plant in South Charleston. The building is now part of a Volkswagen stamping plant.

Stone had installed an amateur radio station in his training area and operated it principly on 160 meters, which was the most popular band in the area at the time, according to Howard Morris, K8SNW, Ripley, who also played a part in this story.

Morris says he often worked the NYA station but has "...long since misplaced or lost my log book and QSL cards relating to this time. But as I recall it, "he wrote me," it was between 1937 and 1939 that Bill was notified that President Roosevelt would drive through the building on an inspection tour of NYA and other federal installations at this location."

"Bill," Howard continued, "decided that he would like to have another station standing by to demonstrate amateur radio to the President and as my station, W8TJY—my call at the time when I lived in nearby Dunbar—was close and I would be at home at the time, he called me and we made a schedule to be in contact at the proper time."

The day of F-D-R's inspection tour arrived and everyone waited in anticipation. Quoting Howard Morris again from his letter, "As the Presidential inspection group progressed through the building, it finally came abrest of the NYA installation. The President's open car halted and Bill briefly described the training facility and the amateur radio station in particular. At that time he gave W8TJY a call. When contact was established, Bill and I made two or three brief transmissions while the President listened. Finally, the President asked Bill for the microphone."

FDR was then talking with Howard Morris. Howard says the President commented "I am very impressed with the installation here, particularly the amateur radio station. I wish I could have the two-way capabilities during my 'Fireside Chats.'"

Morris recall the President asked for his name, age, and how long he had been a ham. But he admits he was so elated to be speaking via radio with the President that he does not recall any other specifics of the contact.

"Bill took over the mike at that point," Morris said, "and signed with me as the President resumed his inspection tour. Needless to say, this was quite a highlight in my amateur experience."

Howard Morris now lives at Ripley in Jackson County and is still an active ham. I often talk with him via 2-meters and he has provided background material on early commercial radio in the Charleston area which has been helpful in providing material for some of my weekly newspaper columns. They are mostly on amateur radio, but when ham news is light it is a change of pace to write about early commercial radio. Howard was kind enough to write up some notes on his FDR contact and it is that material I have quoted in this article. Ted Wolfe (WD4KHL)

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CVRA News Net Resumes Operation

The CVRA News Net resumed operation on the Piedmont Coastal Repeater Network on Wednesday night January 16th. The net, conducted by Wayne Williams, K4MOB is in its sixth year of operation. It was shut down for the summer, and got a late start getting back on due to Wayne getting his hamshack put back in order after construction.

The net stretches from Wilmington, N.C. to Sparta, N.C. on the link system. In addition several repeater owners pick up signals form the link machines and feed it through their own machines.

Wayne Williams confirmed with Danny Hampton, K4ITL, who runs the linking system, that the only requirement for any repeater to Broadcast the news net would be to let either Hampton or Williams know of their plans, so they could be acknowledged on the net, then hook up!

The net is devoted strictly to Amateur news and happenings and runs each Wednesday night at 8:30 p.m. Easter time. It is anticipated that repeaters in Virginia, West Virginia and South Carolina will be picking up the signals and broadcasting them in the near future.

Anyone wanting information about the net, or which Repeaters are relaying may call Williams at (919) 993-5881 after 5 p.m. or write him at 600 Lakedale Road, Colfax, N.C. 27235.

The net is sponsored by the Publications Staff of the Repeater Journal of CVRA-SERA and the Piedmont Coastal Repeater Network.

From the NC Director

To all Repeater owners and representatives. . . Thanks for your support and cooperation over the past years. As of the present we have no major conflicts in CVRA-SERA territory that I am aware of. This speaks well for our self-policing ability.

If you know of any repeater frequency pairs designated for you area which are not in use, please let us know. I presently have 10 requests for 2-meter repeater pairs in the area from Charlotte to Raleigh, and Reidsville to Marion, North Carolina.

Two-Twenty and 440 pairs are available for these areas, but 2-meters is still the favorite. We will soon reach a point where we will have to merge repeater groups to conserve spectrum space. Coordination only works when we all cooperate.

I hope we will continue to get your cooperation in the future.

—Ken Woodard, WA4BVW, NC Director

Round Table Radio Glossary

"Q" SIGNALS. Used by Morse code operators as abbreviations to save time. Used by voice operators who can't remember the words.

Nelson Earns God & Country

Photo by Robin Fergusson, Davie **Enterprise**

KEITH NELSON, KBDJU

Keith Nelson (KB4DJU) was presented the Religious Award for Scouts of the Moravian Church (God & Country). He received the award during the Sunday morning service at the New Philadelphia Moravian Church in Winston-Salem.

To earn this award, Nelson had to study his denomination, its structure, its out reach and missionary (home and foreign) efforts, and its history. He was required to serve as an usher for several months, present a devotion, and work in a home mission. Nelson worked a day at the soup kitchen and accompanied Pastor Henry E. May while he served the prison ministry.

The God & Country Award is a Scouting award earned through one's own denomination with one's own pastor, priest, or rabbi serving as the counselor. The award requirements vary, as does, in some cases, the name, among various denominations. The name may also vary with the age of the young person.

Nelson, now 14, started hamming when he was 12 earning his Technician license. He is active on local VHF, in ARES of Forsyth County, and in Civil Air Patrol communications. He is an honor student in the North Davie Junior High School's 9th grade and plays bass in the band. His scouting is in Troop 502 chartered to the Smith Grove Ruritan Club where he is Senior Patrol Leader.

ADOPT A DECAL

For 50¢ each plus postage, you can have your own CVRA-SERA DECAL. See our story this issue.

Beginning to Look Up

Continued from Page 31

"Well, we gotta have a door," he said, "Why don't you knock out these blocks right here and get me a 24-inch wide doorway and I'll come back this afternoon and check and see how things look under the building."

He then walked to his "official" car, got in and drove off.

Bam. . . Bam. . .Thrump. . .Bash!!! I swung my sledge hammer and in about 5 minutes had his 24-inch hole knocked out the under pinning. . .man was I ticked!

I went back into the house; my loving wife Gerry, knowing what an ordeal I had been through, fed me lunch, then I lay down and took a nap. (Fortunately no nightmares)

At about 3:00 p.m. the inspector came back and I met him at the back of the room. He pulled out his flashlight and crawled part way under the building. He again pulled out his steel rule and measured joist to ground.

"Mr. Williams, you've only got 16-inch clearance under here and the minimum is 18 inches required."

Yep. . . Panicsville. . . again!!! (Don't laugh, you gotta be in this situation to actually experience the rushing feeling you have, with that little tightening sensation. . . kind of like when you look in your rear view mirror and see a car pulling up behind you with blue light flashing.)

"Where are the joist hangers, Mr. Williams? You didn't use joist hangers on your joists," he said.

"Do I need them, " I asked with my most innocent voice.

"Sure you do, they're required under the Guilford County building code," he explained.

I told him that since I built my building the "ole fashioned" way. . . putting my joists ON TOP of the 8-inch concrete block foundation, I didn't feel hangers were needed, since about 4 inches of block were supporting each cross joist.

"Where's your insulation?" Mr. Williams, "You need at least 6 inches and a vapor barrier under this floor you know," he said as he came out from under the building.

No more panicsville. . . too numb now to get scared.

The inspector then made some suggestions, that perhaps we might be able to get by with just some plastic on the ground to act as a vapor barrier since I was well-insulated outside and was planning to brick veneer from the footers up to the roof.

"I tell you what, Mr. Williams, you go ahead and finish your building inside and outside, get yourself moved in, and later this fall or winter, when you're ready, you call me and we'll work this underside situation out. . .okey???"

He then shook my trembling hand, said he'd see me and drove off.

So during the remainder of October and into early November I labored, finished the building inside and let the brickmasons come and finish outside for me.

Today my building inside is complete except for the "utility room" which still lacks a ceiling and floor, but that can wait. We've moved in, got our stuff moved in and are thoroughly enjoying our new space. My hambench has been renovated, repainted and all the equipment put back into place. Antenna cables have been run through the ceiling into the utility room and down to the opening provided behind my ham bench, easy access to the back of all my radios.

We're still moving stuff in, building more cabinets, shelves and making the area more presentable. Each day it falls into place a little better. One corner is still a clutter, but I don't care. . . my new 513-square-foot room is terriffic, with private front and back door, outside spotlights, tiled floor and rich paneled walls.

I think the fight was worth it. I've got what I've wanted for years. And the best part, Gerry likes it too. She lounges on my sofa, watches my TV while I work out there.

As for that Inspector, I'm going to do exactly what he said to do. . . when I'm ready this Fall or Winter, I'm going to call him back and get that final inspection worked out. The only trouble, I'm not sure. . .Fall or Winter of which year!

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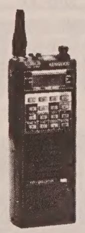

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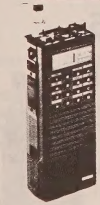

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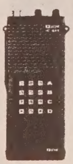

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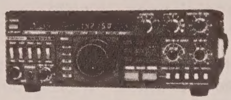

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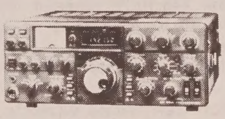

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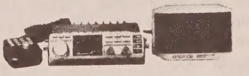

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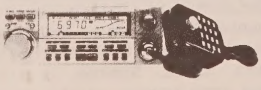

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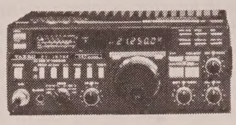
HF TRANSCEIVERS



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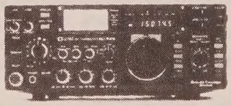

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WEST VIRGINIA NOTES

By: Ted Wolfe, WD4KHL

The FCC adminstered its final field amateur radio license examinations in Charleston on Thursday, Nov. 15.

If any clubs around West Virginia set up a regular schedule of volunteer examinations, please let me know. But do so as far in advance as possible. Then perhaps I can develop a listing of clubs offering exams and a schedule for publication the May *Journal*.

The lead time for editorial copy for this, the February issue which you should receive in the mail around the middle of February, is long. I had to submit this copy to the Editor by January first. And so I wouldn't get caught up in a last minute rush around Christmas I'm writing this about mid December. That should give you some idea of how much lead time I need to write an article for an upcoming *Journal*.

Johnny Jones, WB8CQV, who operates the 146.88 repeater in Charleston, recently made a packet radio contact with the group up in Morgantown. He needs someone else within simplex range to get interested in packet radio so they can work together to iron out any bugs in equipment. In early December Johnny received his narrow shift (I believe that's what he called it) kit to add to his Tucson Amateur Packet Radio TNC which he acquired in the fall. I understand that's so he can experiment with packet on the HF bands.

And, speaking of packet radio, that was the subject of the most recent North American Teleconference Net broadcast on Sunday evening, Dec. 2. The net was carried over Johnny's Charleston repeater. I don't know what the topic of the next net will be, but it will run early in March. I hope there's an amateur repeater near you that carries the net, which usually runs about 90-minutes.

Another amateur news broadcast, Westlink, which runs about ten-minutes each week, is carried on two Charleston area repeaters—WB8CQV, 146.880; and K8SLI, 147.270 mHz. Because repeaters everywhere do not carry the broadcast I run into a lot of hams on 2-meters who don't know what I'm talking about if I mention Westlink.

I was happy to see in the last *Journal* articles written by Don Williams, WA4K, Bluefield; Terry Sanner, WD4ALW; and Terry West, WB4F, Raccoon, Ky. I had asked Don to write up the Bluefield hamfest for the Journal, which he did. Terry/WD4ALW submitted information on the WVSO party. That Terry lives in the Charleston area. The other Terry (West) from Eastern Kentucky submitted news from that area of the country. I'm pleased to see you fellows in print. Keep up the good work.

The *Journal* welcomes a contributions of articles from any ham. You do not have to go through me to get a West Virginia item in the *Journal*, but I'm ready to assist in cases where you don't feel comfortable writing an article. In that case, mail me complete information and I'll try to develop something to cover your story.

Elsewhere in this issue I hope you will find a separate article I wrote about one of our area hams and his memories of a QSO with F-D-R back in the late 1930's.

Things you learn from talking with transient hams: Craig, WA4JST, Richmond, Va., says he operates the 147.03 repeater with his call in Richmond, and the equipment is that from the 146.10/70 repeater listed in Staunton. He says there is no 6.10/70 machine in Staunton now.

Tom Murdock, K81X0, is Superintendent of Kanawha State Forest outside Charleston. Garry White, WD80MB, and I visited Tom's shack in the Superintendent's home early in December.

The West Virginia State ARRL Convention and Hamfest will be held Saturday and Sunday, July 6 and 7 (1985) at Jackson's Mill.

The Fayetteville, WV, hamfest will be held on Sunday, Feb. 24, shortly after you receive this issue of the *Journal*.

Jim Davis, KU8R; Ken Rupe, WD8AEW; and Bill Hunter, K8BS, all of the Charleston area, have been experimenting with ATV. Jim plans an ATV repeater to be mounted on the WCAW tower in the Kanawha City area. I've asked him to take some pictures and think about writing up his ATV repeater. Jim is an occasional anchor for the Westlink amateur radio newscast carried over many repeaters in the US.

Several law enforcement officers in southern West Virginia are also hams. Among them: Jim Mangus, WB8YST, a Kanawha County Deputy Sheriff; Frank Mynes, Jr., K80HZ, Putnam County Deputy Sheriff; Alex Hendrick, N8FWL, Raleigh County Deputy Sheriff; Garry Halsted, K8KFJ, St. Albans police officer; and banker Doug Sweeney, N8AJC, is an auxilliary policeman for St. Albans. Garry Williams, N8FBL, Spencer, is a West Virginia state trooper and his brother, Larry, at Buckhannon is a ham. I don't have a late callbook to check, but I understand his call is KC8LS.

Jim Cantrell, KA8PY C, East Bank, is an Emergency Medical Technician for Kanawha County.

The Triple States Radio Amateur Club (TSRAC) has presented its highest recognition award—the 1984 Amateur of the Year Award— to a husband and wife team of Don Knollinger, WB8ZTV, and Kathy Knollinger, N8EDL, of Moundsville, WV. It was the first time the club named two amateurs to share the award. (See Aug. '84 Journal for story and photo of WB8ZTV)

Charleston area ARRL affiliated Volunteer Examiners plan to administer tests on Saturday, March 2. They will be given in one of the State Capitol complex buildings but I don't have which one as this is written. Because of the scarcity of Extra class operators willing to participate in an on-going program, the Charleston VE's will cooperate with those in the Huntington area to spread out the work load and to offer the tests over a greater georgraphical area. Al Hicks, W8AH. is one ham to contact regarding the Charleston-Huntington area testing.

The Kanawha Amateur Radio Club elected 1985 officers at its December meeting. Those officers were installed at a January dinner meeting. The 1985 officers are: President-Curt Coburnk, WD8KCR; Vice-President-Tim Glasser, KD8TC; Secretary-Betty Palmer, KA8NCP; Treasurer-Oliver Rinehart, KA8TIK; Program Coordinator-Al Hicks, W8AH; and Publicity-Sharon Burton, N8FVW, and Keith Shirley, N8FVX.

Late in the year a small group of Charleston area hams ran two "fox" (transmitter) hunts. They are trying to interest a larger group in this type of activity.

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FINANCIAL STATEMENTS
CVRA - SOUTHEASTERN REPEATER ASSOCIATION
Calendar years 1978 through 1984

	1978	1979	1980	1981	1982	1983	1984
REVENUES							
Advertising	$1,914.50	$ 2,985.75	$ 3,119.75	$ 3,745.70	$ 6,211.70	$ 7,876.75	$ 6,450.90
Associate membership dues	4,745.00	6,865.75	7,073.05	8,050.96	9,632.00	9,967.50	10,501.25
Full membership dues	411.00	1,102.00	1,066.00	1,960.00	1,126.00	2,757.00	1,652.00
Other	-0-	-0-	79.25	16.84	344.28	16.25	54.00
TOTAL REVENUES	$7,070.50	$10,953.50	$11,338.05	$13,773.50	$17,313.98	$20,617.50	$18,658.15
EXPENSES							
Journal mailing	$ 610.12	$ 958.79	$ 1,410.66	$ 1,646.33	$ 1,701.46	$ 2,282.49	$ 2,698.57
Journal printing	4,447.58	6,767.09	8,087.13	8,333.25	12,593.20	14,369.28	15,242.26
Miscellaneous expenses	46.45	1,019.32	263.18	152.42	318.63	-0-	2.35
Directors meetings	258.99	290.99	569.22	330.61	759.41	600.51	795.59
Office expenses	-0-	-0-	-0-	223.31	143.07	111.58	43.13
Amortization of copy machine cost	-0-	-0-	-0-	-0-	-0-	448.00	448.00
Postage other than journal	310.11	393.93	328.17	892.34	361.24	300.17	167.86
Printing other than journal	498.49	877.04	691.72	595.06	801.76	1,026.68	264.74
Returned checks	-0-	-0-	-0-	28.25	-0-	-0-	-0-
Telephone	-0-	-0-	-0-	327.52	574.52	455.00	438.00
TOTAL EXPENSES	$6,171.74	$10,307.16	$11,350.08	$12,529.09	$17,253.29	$19,593.71	$20,100.50
REVENUE OVER (UNDER) EXPENSES	$ 898.76	$ 646.34	$ (12.03)	$ 1,244.41	$ 60.69	$ 1,023.79	($ 1,442.35)

Expenses advanced are two imprest cash funds held by committee chairmen. Membership chairman uses funds for mailing renewal notices. Circulation manager uses funds for mailing journal. In both instances, periodic accounting, complete with receipts are forwarded to treasurer for replen--ishment of funds. Except for postage, the invoices for all material items, printing, etc. are sent to the treasurer for direct payment. All expenditures are fully supported by paid receipts.

Balances January 1, 1984		
Expenses advanced	$ 800.00	
Invested in copy machine	1,792.00	
Cash in bank	2,507.39	5,099.39
EQUITY TO ACCOUNT FOR		$ 3,657.04
Less: Expenses advanced	$ 900.00	
Invested in copy machine	1,344.00	2,244.00
CASH IN BANK DECEMBER 31, 1984		$ 1,413.04

Respectfully submitted,

Ray Adams

Ray Adams, N4BAQ Treasurer

REPEATER-CLUB-NET SERVICE PAGE

The ENC Repeater, Inc. Invites You to Switch to 146.685 as You travel East of Raleigh Reptr. Located on 2,000 ft. tower near Grifton, North Carolina.

Jo Ann Taylor, Sec. Rt. 1, Box 80-36
Swansboro, N.C. 28584

CLUBS, REPEATER OWNERS, NET MANAGERS PROMOTE YOUR ACTIVITIES ON THIS PAGE. – 4-Issues $14.00 A YEAR PREPAID
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444.650 Richmond
147.39 Petersburg
444.850 Petersburg

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Petersburg K4ARO

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Repeater 28-88

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Virginia & North Carolina Tie

Continued from Page 3

first week of January of those memberships in, and presents its annual Honor Roll. Utilizing this measuring device, in addition to tabulating total numbers of repeaters on the new updated February index, gives a fairly accurate picture of VHF/UHF growth in our five states.

This year, we count a total of 721 repeaters in our five CVRA-SERA states on all bands from 10-meters thru 440 mHz. Our Full Membership overall total represents 47% of all those repeaters, as of the first week of January.

Counting 29 repeaters in Georgia, and 5 repeaters in Eastern Kentucky who hold Full Membership status, (Georgia and E. Kentucky are not CVRA-SERA districts) we have Full Memberships representing a total of 321 repeaters.

The following chart depicts totals over the past three years in January of tabulated Full Memberships. More memberships come in throughout the year adding to the total of Full Memberships, but the tabular total has been made during this period each year for growth comparisons:

FULL MEMBERSHIPS

State	85% of Mbrsp	1985 (I-II)	1984 (I-II)	1983 (I-II)
NC	48%	67-98	66-83	72-100
SC	47%	31-38	28-35	22-24
VA **	48%	42-68	44-60	41-58
WV	33%	17-23	16-21	20-28
TN	31%	36-60	32-58	32-47
GA*	—	21-29	14-18	8-9
EDY*	—	5-5	4-4	1-1
ALA*	—	0-0	1-1	1-1
Totals	48%	219-321	205-280	196-268

1 = Total Membership applications
II = Representing total number of repeaters
*** = Are Not CVRA-SERA Districts**
**** = Virginia's Northern section is T-MARC territory**

From the above chart, you will notice a nice growth of repeaters each year joining as Full Members by the first of the year. By the time the Journal is printed, our territory will certainly be represented by more than 50% of the repeaters. Due to deadlines and personnel, it is an impossible task to include late mail in these statistics, even though the Full Memberships are acknowledged in our index which is the last thing cut off before we go to press.

New Full Membership Fees

CVRA-SERA Full Membership is available to Repeater owners at the rate of $10.00 per year. Memberships coming in February 10th thru June 30 for remaining calendar year will be $6.00. Applications coming in after July 1st for remainder of the year will be $5.00. On Jan. 1, 1986, full calendar year membership will be $10.00. Each application may name two representatives who will receive the Journal. All repeaters owned or operated by the named club or representatives may be listed under one Membership.

VHF/UHF Growth

Calendar year 1984 was a good growth year as far as repeaters are concerned. Our new tabulations indicate an overall 9% increase in the number of repeaters in our five State area. The biggest surprise was a surge in growth of 440 mHz activity. A total of 29 new 440 repeaters are on the air, or under construction since our last survey in January of 1984. There were 28 new two meter repeaters added to the indexes during that period. Other gains included 3 for 10-meters and 8 for 220 mHz. A total of 29 new 440 repeaters are on the air, or under construction since our last survey in January of 1984. There were 28 new two meter repeaters added to the indexes during that period. Other gains included 3 for 10-meters and 8 for 220 mHz. Six meters had one less repeater on the index.

Overall we show an increase of 67 new repeaters in our area for a total of 721 machines, compared to 654 in January of 1984.

Obviously two meters is the most used band in VHF, with 72% of all machines being on that band, but, here is how the bands break down in percentages of use as far as repeaters are concerned: 10M - .01%; 6M - 4%; 2M - 72%; 220 mHz - 8% and 440 mHz - 15%.

The chart below shows January of 1984 and January of 1985 totals of repeaters by State and by Band in CVRA-SERA territory.

Continued on Page 42

TOTAL REPEATERS BY-STATE BY-BAND

State	10M	6M	2M	220mHz	440mHz	Total
	84-85	84-85	84-85	84-85	84-85	84-85
NC	0-2	9-9	133-143	24-25	14-25	180-204
SC	0-0	3-2	60-62	4-8	5-9	72-81
TN	2-1	6-6	137-139	14-14	29-31	188-191
VA	1-3	15-14	104-111	7-10	25-37	152-175
WV	0-0	0-1	57-64	2-2	3-3	62-70
Totals	3-6	33-32	491-519	51-59	76-105	654-721

New Printer and New Typesetter For the Journal

Faced with an unbelievable price increase from our former printer, the Journal staff searched for another printer, capable of handling the job of delivering the Repeater Journal as you have grown used to seeing it.

We feel fortunate to have found a very nice place called Commercial Printers in Kernersville, N.C. who gave us some competitive bids on the Journal. They do good work and we hope they will be with us for some time in the future.

We also moved typesetting to Kernersville. We have had complete cooperation thus far from type/design. They have a large selection of type faces, and good machine capability. It may take an issue or two for the Editor and typesetter to get accustomed to each other, different type faces and different type sizes, but it will work out.

Welcome aboard folks? We just might make ham operators out of you.

Round Table Radio Glossary

ANTENNA TUNER. A piece of equipment designed to fool a transmitter into thinking the antenna was cut to a length which resonates at Amateur frequencies. Also fools the operator into thinking that the antenna is working.

July 27 thru Aug. 9, 1985

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EXTRA PRIZE TICKETS 1/$1.00, 6/$5.00, 13/$10.00

NAME ______________________ *CALL* __________

STREET ______________________________

CITY ______________ *STATE* ________ *ZIP* ________

TOTAL ADMISSION TICKETS NEEDED______

TOTAL EXTRA PRIZE TICKETS NEEDED______ TOTAL REMITTANCE__________

Virginia & North Carolina Tie

Georgia and E. Kentucky

The State of Georgia has approximately 125 repeaters overall, but since they are not fully represented as a District, we have no way of knowing how accurate the count might be.

Even though we have heard expressions of desire to join CVRA-SERA from many Georgia Amateurs over the past four years, it seems that no one is willing to start a campaign to educate the repeaters on CVRA-SERA and poll them for possible District status.

From the rumblings we hear constantly, they need to do some form of upgrading in their coordination system. It is extremely difficult for Tennessee and South Carolina Directors of CVRA-SERA to coordinate repeaters on the border area of Georgia because of no close communication available with any Georgia "coordinators." Presently 29 Georgia repeaters are listed as Full Members of our organization, but legally, we can only give them a Journal to read because CVRA-SERA has no authority to step over the line and do any coordination in that State.

It had been suggested to several parties that a portion of the state might be the way to go in forming a CVRA-SERA District, since there seems to be a distinct difference in the thinking of "Northern" and "Southern" Georgia repeaters. Northern Georgia (we have no idea where North & South joins) works on the same bandplan as CVRA-SERA, T-MARC and ARRL. Southern Georgia, however, sees fit to invert their "split" channels which corresponds only to the ARRL bandplan West of the Mississippi River. This is a cause for problems to any splits operating according to the East Coast Bandplan.

Eastern Kentucky is totally apart from the remainder of that State, divided by high mountains. Several parties in EKY have expressed a desire to form a small Eastern Kentucky District of CVRA-SERA. This would involve only about 12 to 15 repeaters.

It would make sense, since they are facing Tennessee and West Virginia and have to coordinate with those two States. They have had limited success with the normal Kentucky coordinator, who looks out for the "other" side of the mountain.

Qualifications for District Status

According to the CVRA-SERA Bylaws, District status may be obtained by any group of repeater owners numbering at least 10, by applying to the CVRA-SERA board with a formal request for forming a District. In the package, applications, and Full Membership fees should be accompanied with a map showing the prospective District. It does not have to cover a state, there are no limitations as to size of the District, only the minimum number of repeaters as Full Member status.

When the Board okays the application, the Secretary of CVRA-SERA notifies the new group of their acceptance. The new District is then responsible to nominate a Director and a Vice-Director. If either or both are unopposed, they are elected. If there are two or more applicants, an election by mail ballot is held and the victors are named Director and Vice-Director of the new district.

That Director and Vice-Director then assumes command of the District, and begin the coordination process. The Organization assists them with printouts, forms, and experience when needed. The main factor in District status, is the experience to draw from CVRA-SERA, the Repeater Journal, an information vehicle, and "official" coordination status for that are, through CVRA-SERA, recognized by FCC and ARRL.

Until this happens, Eastern Kentucky and Georgia will remain out of our hands, and on their own to provide coordination necessary to prevent problems to repeaters in our CVRA-SERA bordering States.

—Wayne C. Williams, Editor

At Press Time!!!

Just before we sent the Journal to the printer on January 25, the following Full Membership totals were in.

Full Memberships-243, representing 353 repeaters,

ORLANDO HAMCATION and COMPUTER SHOW

MARCH 8, 9, 10, '85

AIR-CONDITIONED ORLANDO EXPO-CENTRE

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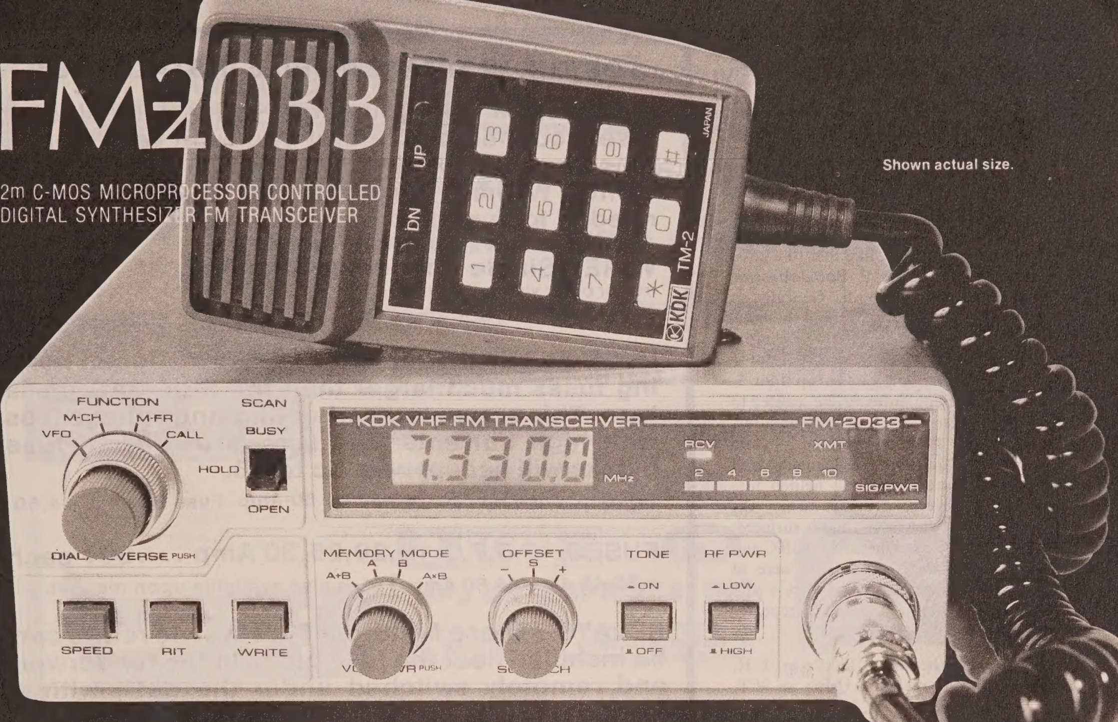
FM-2033

2m C-MOS MICROPROCESSOR CONTROLLED
DIGITAL SYNTHESIZER FM TRANSCEIVER



Shown actual size.

6 in 1

Exclusive KDK 6 in 1 control is now joined by 6 exciting new KDK features:

NEW! % Soft Orange background Liquid Crystal Display (LCD) for direct sunlight viewing plus lighting for night viewing.

NEW! % Offset (+, –, S) stored in memory along with the frequency information.

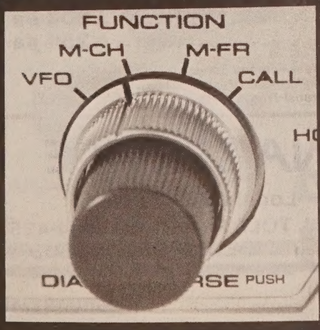
NEW! % Frequency coverage of 142.000 to 149.995 MHz for M.A.R.S. and C.A.P. usage.

NEW! % Chrome front panel with accent knobs and lighter color on case to match today's auto decor.

NEW! % Scan for signal now has 3-second delay before resume after loss of signal.

NEW! % Repositioned controls for more convenient operation.

The Exclusive KDK 6 in 1 Knob.



- Only memories with data are scanned; blanks are skipped.
- Complete memory back-up with power unplugged. Re-chargeable Ni-Cd with capability of several months back-up of memory.
- Single frequency sub-audible tone generator included as a standard feature.
- Tone unit switch on front panel to prevent "humming" on the wrong channel.
- Repeater input monitor capability with the push of a single momentary switch.
- Solid-state level meter for both output level and input level monitoring.
- User programmable initial characteristics for band limits, channel step size, etc.
- Odd repeater splits can be handled with the memory in the AxB mode.
- Programmable band-scan limits are stored in protected RAM.
- Modular construction with pluggable interconnecting wiring.
- Touch-Tone* microphone TM-2 is standard with each radio.
- Change channels, skip-scan or step up and down the band from TM-2 microphone.
- Audible beep for end-of-band or last memory location for better "eye's off" operation.

The KDK FM-2033 represents a significant advance in user convenience and simplicity of operation for the radio user. The KDK '33' series of transceivers provides excellent readability in any lighting condition for either the operating frequency or the memory channel number in use. The use of a warm orange background for the LCD displays improves the readability by providing an easy on the eyes contrast improvement.

Simplicity of operation has always been the mark of the KDK design team and the FM-2033 is no exception. From the single knob frequency and memory selection to the automatic recall of the desired repeater offset from memory, the FM-2033 continues to provide relaxed, comfortable mobile operation.

Once the 10 memory frequencies have been selected, a single knob is all that is required for operation on the standard simplex or repeater channels. Using the audible beep as the end of memory marker allows setting to a particular channel without even looking at the radio.

In the scan mode, scanning for a busy memory or pre-programmed band scan keeps you up to date on the happenings in the area. Very busy frequencies can be skipped by using the up key on the TM-2 microphone. If a full 10 memories are not used, the unused ones can be marked for scan skip so that no time is wasted checking them.

The FM-2033 provides a clean 25 watt output signal across 142 - 149.995 MHz to operate in balance with most repeater signals and provide quieting on the simplex operations. M.A.R.S. (NAVY too!) and C.A.P. frequencies are also accommodated.

You want convenience, reliability and easy operation for your mobile station and a tough to beat dollar value. Check out the FM-2033 at your local dealer TODAY or send a QSL for specifications.

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Specifications are nominal and are subject to change. All KDK transceivers meet or exceed FCC regulations regarding spurious emissions.

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Remote Attendance at a Christmas Party?

—by Ray Adams N4BAQ

When the Radio Amateur Club of Knoxville held its annual Christmas party at the Hungry Fisherman restaurant in West Knoxville (there ought to be a law against taking an event like that to a good seafood buffet), club V.P. Bob Johnston, N4AIA was in Savannah, Georgia on business. Bob had driven around the hotel and eyed the layout carefully before registering, asking the desk clerk for a particular corner room on the top floor — he had a "receiving antenna" he wanted to hang in the tree outside the window. Actually, the antenna received — and transmitted — quite well on 75 meters, and the fellows back home had helped him while away several evenings when the "special address" idea just naturally surfaced. Club Treasurer E.H. Vineyard N4GRC and member Steve Fritts WA4GZE were at home on 75 meters talking to Bob,— and patching him onto the club repeater W4BBB/R on 147.90/147.30.

Exactly on schedule at 8:00 p.m. E.H. called me at the meeting. Using an H.T. from inside the restaurant, I answered right up and after checking to see that both were full quieting into the machine, on instructions from E.H. to proceed, I called Bob — appropriately using the club's call rather than my own. The entire audience, myself included, was amazed at the clarity and fidelity of Bob's unmistakably familiar voice in reply. The restaurant staff and other customers were dumbfounded, as both Bob and I "hammed it up" mentioning "Savannah, Georgia" and "Knoxville, Tennessee" along with the appropriate call signs. Of course HT's by the dozen appeared, all with volume sufficiently loud to dominate the entirely of even a sizeable restaurant.

Bob expressed his regret that he was unable to physically attend the meeting although he was present in both thought - and voice!

Prior to the contact, L.D. Strader WA4ZWH had bet me a drink it wouldn't work well enough for the two to communicate. At conclusion of the contact, L.D. got up, went to the end of the table, picked up a set of salt and pepper shakers and returned to his chair with the comment "I will eat my words". Then he pulled out two dollar bills, passed them across the table to me with the comment "buy your drink". Today the shack of both N4GRC and WA4GZE contain a single one dollar bill, appropriately framed. They don't need a label; we know what they represent, and we have a sneaking suspicion Bob enjoyed the Xmas party too!!!

I enjoyed that one too!!!

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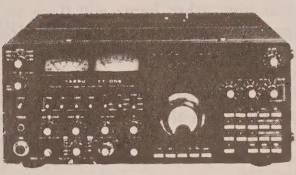
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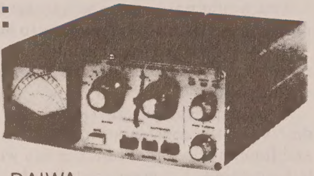
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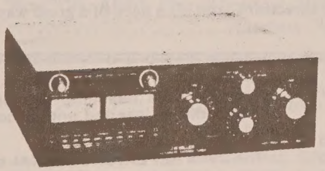
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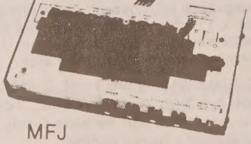
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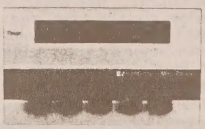
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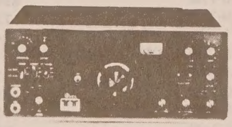
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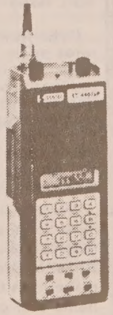
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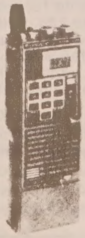
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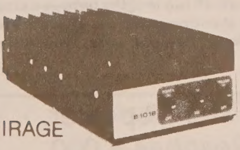
MIRAGE

A Newcomer's Guide To Two

—by Wayne C. Williams, K4MOB

Thank you for the comments from our first installment of the Newcomer's Guide to Two" we started in the November issue. There are many, many new Amateurs out there, as well as many old timers who are being introduced to the new world of VHF every day. This information is for them.

Common Courtesy on FM Repeaters

You would normally expect to act in public with courtesy and politeness. This is a good guide as to how to conduct yourself on a VHF repeater. The world is full of scanners and who knows how many of the general public is listening to us with interest, envy and out of curiosity.

Aside from the general public, our fellow hams on frequency deserve a little consideration too. You hear a lot of people fussing and fuming about that repeater and what those fellows are always talking about. Not everyone talks about what we are interested in. We are fortunate in the fact that most all areas have several repeaters available and are usually sitting idle, waiting for someone to use them. So if you feel you don't fit in with what is going on one repeater, shift to another. If nothing is happening, generate activity by sticking around, inviting people to join you, and getting a general "happy" conversation going that someone tuning across might like to listen to, or even join in.

If you don't like what is going on with a certain repeater, leave them alone. You have two switches you can use: (1) The channel selector, and (2) the on/off switch. Either of these will prevent you any frustration, use them.

Your tone in the morning can set the mood for everyone on the repeater. You hear a lot of people who are tired and always feeling bad in the morning. If you listen to them enough, you begin to get tired and feel bad. Change the channel, or if these are friends of yours, participate and tell them how lucky they are, being alive,keep your talking high key, happy, courteous and friendly and you will be amazed at how other hams will flock to your conversation and participate. No one wants to hear sobbing and crying every morning, so you be a happy one and cheer up your ham community every morning.

As you travel through the country on your vacation, listen to repeaters. Make friends as you travel along. You will notice some repeater users very friendly for traveling folks, others seem a little cool. This is the way it is, but everyone cannot be like you would like for them to be.

So enjoy your 2-meter FM, it will give you what you put into it. It makes for swell company when you are traveling, it's good when you need help or directions, and it's a heck of a good way to make new friends.

REPEATER JOURNAL ADVERTISING RATES

Effective 1 January 1985

The Repeater Journal is a 3 column magazine with overall page dimension of 8½ x 11 inches. Our page size enables a wide variety of ad sizes from full page down to one column inch size.

Column Widths are 1 col: 2-1/4-in., 1-1/2 col: 3-1/2-in., 2 col: 4-5/8-in., 3 col: 7-1/8-in. Ad widths will be based only with the specified column widths.

DEADLINES: New advertising copy or ad changes must be in the hands of our Advertising Manager no later than the 20th of the month on the 2nd month prior to publication. We cannot guarantee insertion of ads after deadline, although every effort will be made to accomodate.

ADVERTISING DEADLINES

FEB. Issue–Dec. 20 MAY Issue–Mar. 20
AUG. Issue–June 20 NOV Issue–Sep. 20

CVRA REPEATER JOURNAL advertising rates apply to exact size, camera ready copy. We can provide typesetting and reduce art for your ad at our cost. Composition and typesetting for full page ad approximately $25 to $28. Half page ad from $12 to $15. Reduction of artwork for ad with no type needed is $4.50. COLOR: We can provide one additional color on our standard color pages for $25.00.

The Repeater Journal layout size is very close to most National magazines. If you wish to use a page from one of the magazines, to promote your product, we can reshoot on the camera, insert your store name and customize for your particular application. Be sure to submit a clean, unwrinkled copy of the magazine page.

Contract advertising may be billed quarterly at the request of Advertiser. No volume discounts or contract discounts are available. It is the advertisers responsibility to cancel or request changes in advertising at the time he pays his bill, or before ad deadline, otherwise, advertising will be repeated until further notice.

BUSINESS CARDS, CLASSIFIED ADS AND HAMFEST advertising must be sent accompanied by full payment for insertion. Advertisers who have not paid for previously published advertising before upcoming issue deadline, cannot have any advertising inserted until account is paid in full.

The CVRA REPEATER JOURNAL cannot be responsible for errors in advertising, or held accountable for equipment or accessories that do not live up to the advertised claim. We are not responsible and cannot guarantee insertion of advertising received after deadline.

Advertising copy MUST be mailed to:
REPEATER JOURNAL ADV. MANAGER,
SHARON WARD, 5573 Vienna-Dozier Rd.,
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Ins. Frt. or Ins. Bk. Cover	7-1/8" x 9-7/8"	$90.00
Full Page	7-1/8" x 9-7/8"	75.00
Full Page Bleed (any sides)	8-1/2" x 11"	90.00
2/3 Page (Vertical)	4-5/8" x 9-7/8"	55.00
1/2 Page (Horizontal)	7-1/8" x 4-3/4"	42.75
1/2 Page (Vertical)	3-1/2" x 9-7/8"	42.75
1/2 Page (Vertical 2-col)	4-5/8" x 7-1/8"	42.75
1/4 Page (Vertical Only)	3-1/2" x 4-3/4"	24.00
1/3 Page (Vertical Only)	2-1/4" x 9-7/8"	30.00
1/6 Page (Vertical)	2-1/4" x 4-3/4"	16.00
1/6 Page (Horizontal)	4-3/4" x 2-1/4"	16.00
1/12 Page (Vertical Only)	2-1/4" x 2-1/4"	9.00
Business Cards - Standard Size	(4 Issue Contract Only)	14.00/yr. In Advance

Classified Ads (30 Words Maximum per ad) In Advance 2.50
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Sizes listed above are width by length in that order. Ads which run lengths between sizes listed above will be billed according to column inch rate at midpoint. Prices above are for exact size, camera ready positive photoprint, or pasteup. Camera work, typesetting additional. No charge for layout.

It's A Known Fact! Hamfests Which are Advertised In The Repeater Journal Have Larger Attendance. Your Full Page Ad Reaches 4,000 Readers For 2¢ Per Person!

Coming Events

1985 HAMFEST CALENDAR

Note: Dates marked with an asterisk are NOT confirmed dates. They are based on last year's show dates. Clubs and groups sponsoring hamfests are urged to contact the Journal Editor for confirmation of their show dates.

Deadline for May issue is April 1.

FEBRUARY

17	Winter Hamfest, ELKIN, NC
24	Hamfest, FAYETTEVILLE, WV
22-24	Ohio State ARRL Conv, SHARONVILLE, OH
24	Winterfest, VIENNA, VA

MARCH

8-10	Hamcation, ORLANDO, FLA
9	Hamfest, DALTON, GA
9-10	Louisiana State ARRL Conv., LAFAYETTE, LA
16-17	Roa. Div. ARRL Conv/Hamfest, CHARLOTTE, NC
31	Hamfest, TIMONIUM, MD

APRIL

14	Hamfest, RALEIGH, NC
26-28	Hamvention, DAYTON, OH

MAY

4-5	Hamfest, GREENVILLE, SC
4-5	Hamfest, ALBANY, GA
18	Hamfest, DURHAM, NC
11-12	Roa. Div. League Plan Meet, RALEIGH, NC
18-19	Alabama State ARRL Conv., BIRMINGHAM, ALA
18-19*	Hamfest, LAKE HARTWELL, GA
25-26	Hamfest, KNOXVILLE, TN
26	RVARC Hamfest, ROANOKE, VA
26*	Hamfest, HARMANS, MD

JUNE

2*	Hamfest, HUMBOLT, TN
2*	Hamfest, MANASSAS, VA
8*	Hamfest, BOWLING GREEN, KY
13-14*	Hamfest, ROSSVILLE, GA

JULY

6-7	Georgia State ARRL Conv., ATLANTA, GA
6-7	WV St. Radio Council/Hamfest, JACKSONS MILL, WV
6-7*	Hamfest, ROSSVILLE, GA
20	Swapfest, CARY, NC
20*	Hamfest, ANNISTON, AL
20-21*	Hamfest, CROSSVILLE, TN
21*	TSRAC Hamfest, WHEELING, WV
20-21*	Hamfest, CHARLESTON, SC
27-28*	Hamfest, ASHEVILLE, NC
28*	Hamfest, NASHVILLE, TN
28*	BRATS Hamfest, W. FRIENDSHIP, MD
28*	Jax County Hamfest, RIPLEY, WV

AUGUST

3-4	Hamfest, JACKSONVILLE, FL
4*	Hamfest, (Winchester) BERRYVILLE, VA
11*	Hamfest, LEXINGTON, KY
17-18	Hamfest, HUNTSVILLE, AL
24-25*	Hamfest, MADISON, GA
24-25*	Central Ala Hamfest, MONTGOMERY, AL
25	Hamfest, BLUEFIELD, WV
25*	Hamfest, CEDARS OF LEBANON PK, TN
25*	Hamfest, MORGANTOWN, WV
25	Illinois State ARRL Conv., ST. CHARLES, IL
30-Sep 1*	Hamfest, SHELBY, NC

SEPTEMBER

6-8	Florida State ARRL Conv., MELBOURNE, FL
7-8*	Central Ga. Hamfest, WARNER ROBBINS, GA
7-8*	Swapfest/Picnic, CLEVELAND, TN
8*	Hamfest, GAITHERSBURG, MD
14*	WCARS II Swapfest, GREENWOOD, SC
14-15	Hamfest, MOBILE, AL
15*	Hamfest, AUGUSTA, GA
21-22	Hamfest, VIRGINIA BEACH, VA
22*	Hamfest, GAINESVILLE, GA
22*	Hamfest, CINCINATTI, OH
28-29	ARRL Nat'l Conv., LOUISVILLE, KY
29*	Hamfest, LAKE LANIER, GA

OCTOBER

4-6	ARRL Nat'l Conv., LOUISVILLE, KY
6*	Hamfest, ROCK HILL, SC
6*	Hamfest, ROME, GA
12-13*	Hamfest, CLEARWATER, FL
12-13*	Hamfest, MEMPHIS TN
13*	Hamfest, MAYESVILLE, NC
19	Tri-Cities Hamfest, GRAY, TN
26-27	Delta Div ARRL Conv/Hamfest, CHATTANOOGA, TN

NOVEMBER

2-3*	Hamfest, STONE MT., GA
3*	Hamfest, CONCORD, NC
30-Dec 1	Hamfest, GREENSBORO, NC

**Tentative Date, Based on Last Year's show date*

Bluefield Club Repeater

The policy paid replacement value on the repeater, and those proceeds were pooled with donations and a club grant of $500 to purchase the new repeater.

The new repeater is equipped with autopatch, including last-number-called redial and several automatic dialing capabilities (up to 215 autodial number in all). Other features include synthesized voice tail messages, emergency power, and voice readout of received signal strength. Depending upon funds received, the repeater may have a feature called "Message Master," which includes a digital voice recorder and gives the repeater the capabilities of mail box and tail messages, and other announcements in real (not synthesized) voice.

An audio delay circuit will allow total muting of DTMF tones entered from the repeater receiver. This will keep telephone numbers confidential. Program changes will be made remotely, using CTCSS subaudible tone access and muted DTMF tonepad entries. Control of the repeater will be by telephone, which also allows an alternate method of programming.

East River Amateur Radio Club Memberships are solicited in support of the repeater and other activities. To join, write for information to:

East River Amateur Radio Club, Inc.
2113 Hemlock Hill
Bluefield, WV 24701

Also include your home telephone number, and whether or not you are an ARRL and CVRA/SERA member. Members also receive a free subscription to the club newsletter, the East River Current.

The club meets every first Monday of the month at the Bonanza Restaurant in Bluefield, West Virginia, at 7:00 p.m. Those wishing to eat may arrive as early as 6:30 to go through the line and begin eating. The program for this month (February 4th) was a viewing of the ARRL videotape, "Amateur Radio's Newest Frontier, Vol. 2," a 28-minute color program prepared since the flight of STS-9 (the flight of Dr. Owen Garriott, WSLFL). Other similar programs are planned for the future.

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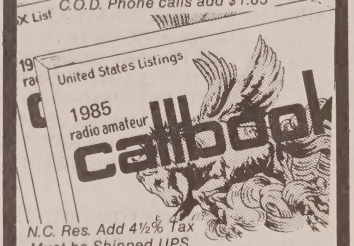

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Orders for tags should be placed by completing a form and submitting it along with a check payable by completing a form and submitting it along with a check payable to "North Carolina ARES" to your local Emergency Coordinator. Orders placed through your EC will be given the highest priority. If you do not have an EC, you may send your order to: Reed Whitten, AB4W, North Carolina Section Emergency Coordinator, 1208 Oxford Place, Cary, N.C. 27511. Since these tags are custom made, please allow at least two months for delivery.

Sample License Application

I am a licensed radio amateur and want to demonstrate my participation in the HAM WATCH Program by displaying a HAM WATCH vehicle identification tag on the front bumper of my vehicle. I am familiar with the guidelines and principles of the North Carolina HAM WATCH Program and agree to make available my amateur radio communication capabilities.

Call Sign ____________________ No of HAM WATCH tags __________

Name ______________________________ Cost per tag $4.00

Address ________________________ Total $ __________

City ________________________, NC (Zip) __________

Home Phone ______________ Business Phone ______________

County ______________ EC's Call ______________

Estimated miles driven in North Carolina per week ______________

Signature ______________________

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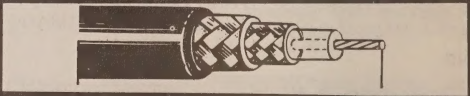
News Deadline for May Issue is April 1.

Ad Deadline Is March 20.



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I convinced my club to buy a repeater controller from ACC and I'm glad I did.

The group I belong to was looking to upgrade our system and I was the one asked to investigate. Of course, we've always been the best in our area but we needed more. We needed a system that was reliable, easy to interface, cost-effective, and something that would free-up the technical committee for more interesting projects than just keeping the equipment running.

Everyone in the club put a few bucks into the pot and it was ours!

We really use the features like the scheduler, remote programming (from an HT, over the phone, or via a computer terminal), informative voice messages and courtesy tones, telemetry, remote bases, and the most sophisticated autopatch ever designed for amateur use.

Of course, the controller is state-of-the-art, commercial quality, and built to last. Workmanship so solid even the military uses them.

What impressed me even more, though, is the support we get from the staff at ACC — both before and after the sale. And they protect our investment through simple plug-in software up grades . . . new features and capabilities that keep our club on top.

I feel good about recommending the Advanced Computer Controls' line of repeater controllers. After all, it's *my* club's money that was spent and ***my* reputation that was on the line.**

Call or write for detailed specifications on the RC-850 and RC-85 Repeater Controllers.

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THE CVRA—SOUTHEASTERN REPEATER ASSOCIATION STATE DIRECTORS, VICE DIRECTORS AND ASSISTANTS

For Assistance in Repeater Coordination, Frequency Coordination, Changes in Repeaters, and Any other Assistance You May Require from the CVRA, Contact Your Local Director or His Assistant.

NORTH CAROLINA

DIRECTOR
Western Coordination
Ken Woodard, WA4BVW
Route 2, Box 407
Canton, N.C. 28716
(704) 235-8354

VICE-DIRECTOR
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P.O. Box 12734
Raleigh, N.C. 27605
(919) 832-8733

VIRGINIA

DIRECTOR
Lee McDaniel, WB4QOJ
8506 Belle Haven Rd. NW
Roanoke, Va. 24019
(703) 563-4705

VICE-DIRECTOR
Wally Burkette, WA4KXV
242 Raintree Road
Virginia Beach, Va. 23452
(804) 486-1555

S. WESTERN ASSISTANT
Larry Lewis, WB4JBJ
101 Jane Randolph St.
Forest, Va. 24551
(804) 525-5901

WEST VIRGINIA

DIRECTOR
Ted Wolfe, WD4KHL
P.O. Box 133
Cabin Creek, W.Va. 25035
(304) 595-3970

V. DIRECTOR-NORTH
Mike Palmer, K8LG
1313 Airport Blvd.
Morgantown, W.VA. 26505
(304) 296-9175

V. DIRECTOR-SOUTH
Karl Morris, WB8GDY
1009 Sand Hill Drive
St. Albans, W.Va. 25177
(304) 727-8453

SOUTH CAROLINA

DIRECTOR
Al Harney, N4EOY
224 Morningwood Dr.
Lexington, S.C. 29072
(803) 359-5305

VICE-DIRECTOR
Hap Griffin, WA4UMU
20 Harrell Road
Sumter, S.C. 29150
(803) 773-8275

TENNESSEE

DIRECTOR
J. Tom Park
1198 Lock 4 Road
Gallatin, Tn. 37066
(615) 452-3822

VICE-DIRECTOR
Gene Giesler, W4TYU
4544 Lyons View Drive
Knoxville, Tn. 37919
(615) 525-5781

SOUTHEAST ASST.
Barbarra Gregory, WA4RMC
8619 Smokerise Lane
Chattanooga, Tn. 37421
(615) 892-8889

EAST CENTRAL ASST.
Billy Gilley, W4YXA
208 Rivermont Dr.
McMinnville, Tn. 37110
(615) 473-5383